# Quarterly Business Review (QBR)

**November 5, 2013**

**9:30am – 3:20 pm**

**Rates Hearing Room**

To participate by phone that does not charge long distance, please dial: 1-203-692-7388.
If you are calling long distance, please dial: 1-866-801-1879.
When prompted, enter access code 4577646.

| Time | Min | Agenda Topic | Slide | Presenter |
|---|---|---|---|---|
| 9:30 | 5 | Review Agenda & Follow-up from Informal Survey | 2 | Mary Hawken |
| 9:35 | 30 | CFO Spotlight | ~ | Nancy Mitman |
| **Financial Highlights** | | | | |
| 10:05 | 40 | ▪ Review of 4th Quarter Financial Results<br>▪ Review of FY 2014 SOY Budget | 3-19 | Mary Hawken, Cheryl Hargin, Danny Chen, Kyna Alders, Mai Truong |
| 10:45 | 10 | Slice Reporting | 20-26 | Craig Larson, Timothy Roberts, Janice Johnson |
| 10:55 | 15 | ▪ Review of 4th Quarter Capital Financial Results<br>▪ Review of FY 2014 SOY Budget | 27-29 | Kathy Rehmer, Kyna Alders |
| 11:10 | 20 | Capital Project Status Report—updated 11/4 | 30-34 | Dennis Naef |
| 11:30 | 30 | Capital Investment Prioritization | 34-46 | Mike DeWolf |
| 12:00 | 60 | Lunch | ~ | ~ |
| **Other Agency Topics** | | | | |
| 1:00 | 20 | Grand Coulee Dam Third Powerplant Overhaul | 47-77 | Mike Alder |
| 1:20 | 15 | Access to Capital Status Update | 78-81 | Javier Fernandez, Jon Dull |
| 1:35 | 10 | Radio Spectrum Status Update | 82-87 | Brian McConnell, Shawna Lamothe |
| 1:45 | 20 | Follow-up on Functional Budgeting | 88-92 | Brian McConnell |
| 2:05 | 30 | Update on NOS & Celilo Projects | 93-103 | Brian Scott |
| **Operational Excellence** | | | | |
| 2:35 | 10 | Canadian Real Time Snowpack Monitoring Network Expansion | 104-112 | Erik Pytlak |
| 2:45 | 15 | Fall Protection Program | 113-127 | Darlene LaBrosse |
| 3:00 | 15 | Occupancy Sensors Project | 128-144 | Mira Vowles, Sheila Bennett |
| 3:15 | 5 | Questions, Comments, Future Meeting Topics | ~ | Mary Hawken |
| 3:20 | ~ | Adjourn | ~ | ~ |

# *Financial Highlights*

# Financial Overview for FY 2013 through September 30, 2013

## Agency

- **Audited FCRPS Net Revenues for FY 2013 are negative $105 million. This is $23 million greater than the rate case forecast.**
- **Adjusted Net Revenue for Power and Transmission is $56 million.**
  - The Rate Case forecast of Adjusted Net Revenue was $27 million and the Start-of-Year forecast was $51 million. The 3rd Quarter Review forecast was $75 million.
- **Cash Reserves ended at a level of $1,272 million, an increase of $250 million from last year. Reserves available for risk were $641 million.**
- **BPA spent $883 million on capital projects in FY 2013. This includes projects for Federal Hydro system replacements, transmission expansion and replacements, energy efficiency, fish and wildlife, and information technology projects.**

## Power Services

- **Power Services Net Revenues for FY 2013 are negative $15 million.**
  - Operating Revenues for FY 2013 are $2,632 million.
  - Total expenses (operating expenses and net interest) for FY 2013 are $2,647 million.
- **Power's Net Revenue forecast for the Rate Case was negative $2 million and Start-of-Year was negative $17 million. The 3rd Quarter Review forecast was $0 million.**
- **Power Services net revenues were $14 million less than the rate case forecast.**
  - Due to lower than expected streamflows, revenues (total revenues less power purchases, augmentation, and transmission acquisition) in FY 2013 came in $127 million below the rate case forecast. The primary drivers were:
    - Net Secondary revenues were $18 million below rate case, due to a lower market price environment and below-average water year.
    - Lower preference loads than expected reduced load shaping and demand revenues by a total of $46 million.
    - The 4(h)(10)(C) credit was lower than rate case by $12 million. This decrease was due to lower than forecast market prices which resulted in lower purchase power costs.
    - Transmission acquisition costs came in $10 million higher than the rate case.
  - Power Services expenses (total costs excluding power purchases, augmentation, and transmission acquisition) were $113 million below the rate case forecast.
    - Trojan operation and maintenance costs were $28 million less than the rate case due to the Trojan Spent Fuel Settlement.
    - Energy Northwest debt service decreased $23 million due to additional nonfederal refinancing/restructuring and the ISFSI settlement.
    - Columbia Generating Station costs were $16 million lower due to updates to the decommissioning trust fund schedule (due to a CGS license extension) and the return to CGS of excess monies related to the depleted Uranium Program.
    - Internal operating costs were $11 million below the rate case due to hiring delays, contracting delays for R&D projects, slower than expected progress for the EIM system, and the use of fewer IT resources for the new regional contracts.
    - Net interest costs were $12 million less than forecast due to a reduction in the average interest rate for federal bonds offset somewhat by increases in the interest expense associated with Pre-Pay funds.
    - Depreciation and Amortization costs were $9 million higher due to IT capital projects being placed in service sooner than expected and Fed Hydro plant in service actuals coming in higher than forecast.
    - Renewables costs were down $8 million due to lower than expected spending for new resource development and the receipt of FERC-ordered punitive damages for Foote Creek I and IV wind projects.
    - Conservation Acquisition costs were down $6 million due to contracting challenges and funds held to accommodate forecasted partner spending that did not materialize.

# Financial Overview for FY 2013 through September 30, 2013

## Transmission Services

- **Transmission Services Net Revenues for FY 2013 are $71 million.**
  - Actual Revenues for FY 2013 are $980 million.
  - Actual Total Expense (operating expenses and net interest) for FY 2013 are $909 million.
- **The Net Revenue Rate Case forecast was $29 million and the Start-of-Year forecast was $69 million. The 3rd Quarter Review forecast was $75 million.**
- **Transmission Services exceeded expectations with net revenues coming in $43 million over the rate case forecast.**
  - Revenues were $10 million higher than the rate case mainly due to higher than expected Reimbursable, PTSA termination fees, and Gen Input revenues offset by decreases in Point-to-Point revenues.
  - Lower spending, $33 million, was primarily driven by lower depreciation and interest expense reflecting lower than expected capital spending and lower than expected interest rates on borrowings. These savings were partially offset by unexpected capital to expense write-offs and settlement payments.

Federal Columbia River Power System (FCRPS)
**FY 2013 FOURTH QUARTER REVIEW**

# Net Revenues and Reserves

# Actual Results for FY 2013

**October 31, 2013**

# 4th Quarter Review – Executive Highlights

($ in Millions)

| | A FY 2012 Actuals[/2] | B FY 2013 Start of Year[/2] | C FY 2013 Unadited EOY Actuals[/2] |
|---|---|---|---|
| 1. **Revenues** [/1] | 3,380 | 3,381 | 3,413 |
| 2. **Expenses** [/1] | 3,293 | 3,488 | 3,518 |
| 3. **Net Revenues** [/1,3] | 87 | (107) | (105) |
| 4. **Adjusted Net Revenue** [/4] | 128 | 51 | 56 |
| 5. **End of Year Financial Reserves** [/5] | 1,022 | 980 | 1,272 |
| 6. **BPA Accrued Capital Expenditures** [/6] | 664 | 995 | 632 |

**Footnotes**

<1 The actuals for Revenues, Expenses and Net Revenues are audited.

<2 Does not reflect power "bookout" transactions.

<3 Net revenues include the effects of non-federal debt management. An example of non-federal debt management is the refinancing of EN debt.

<4 Adjusted Net Revenue is calculated by adding Power Services and Transmission Services Net Revenues.

<5 Financial reserves consist of BPA cash, investments in U.S. Treasury market-based special securities and deferred borrowing.

<6 Funded by borrowing from the U.S. Treasury.

# FY 2013 End of Year Financial Results & FY 2014 SOY Budget

**Report ID: 0023FY13** | **Transmission Services Summary Statement of Revenues and Expenses** | **Run Date/Time: October 21, 2013/ 04:48**

**Requesting BL: TRANSMISSION BUSINESS UNIT** | **Through the Month Ended September 30, 2013** | **Data Source: EPM Data Warehouse**

**Unit of Measure: $ Thousands** | **Preliminary/ Unaudited** | **% of Year Elapsed = 100%**

| | | A | B | C | D <Note 1> | E |
|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals: FYTD |
| | **Operating Revenues** | | | | | |
| 1 | Sales | $ 790,969 | $ 844,331 | $ 821,638 | $ 804,463 | $ 803,690 |
| 2 | Miscellaneous Revenues | 30,263 | 31,802 | 38,615 | 50,348 | 54,007 |
| 3 | Inter-Business Unit Revenues | 143,909 | 93,888 | 103,067 | 109,110 | 122,177 |
| 4 | **Total Operating Revenues** | **965,141** | **970,021** | **963,319** | **963,922** | **979,873** |
| | **Operating Expenses** | | | | | |
| 5 | Transmission Operations | 121,792 | 133,590 | 131,248 | 123,016 | 114,942 |
| 6 | Transmission Maintenance | 135,377 | 150,831 | 153,278 | 148,808 | 146,933 |
| 7 | Transmission Engineering | 46,111 | 32,803 | 41,855 | 42,493 | 45,876 |
| 8 | Trans Services Transmission Acquisition and Ancillary Services | 152,809 | 142,079 | 147,825 | 152,195 | 156,807 |
| 9 | Transmission Reimbursables | 26,722 | 9,914 | 9,682 | 11,725 | 27,225 |
| | BPA Internal Support | | | | | |
| 10 | Additional Post-Retirement Contribution | 17,243 | 17,821 | 17,821 | 17,821 | 17,820 |
| 11 | Agency Services G&A | 57,065 | 60,961 | 58,357 | 59,802 | 59,868 |
| 12 | Other Income, Expenses & Adjustments | (280) | - | (2,297) | 618 | (1,629) |
| 13 | Depreciation & Amortization | 189,811 | 218,124 | 196,980 | 202,680 | 206,545 |
| 14 | **Total Operating Expenses** | **746,650** | **766,122** | **754,748** | **759,159** | **774,388** |
| 15 | **Net Operating Revenues (Expenses)** | **218,491** | **203,899** | **208,572** | **204,763** | **205,486** |
| | **Interest Expense and (Income)** | | | | | |
| 16 | Interest Expense | 180,083 | 228,887 | 190,357 | 175,116 | 174,430 |
| 17 | AFUDC | (37,010) | (32,255) | (33,400) | (31,400) | (26,855) |
| 18 | Interest Income | (13,293) | (21,467) | (17,260) | (14,067) | (13,493) |
| 19 | **Net Interest Expense (Income)** | **129,781** | **175,165** | **139,697** | **129,649** | **134,082** |
| 20 | **Net Revenues (Expenses)** | **$ 88,710** | **$ 28,734** | **$ 68,875** | **$ 75,114** | **$ 71,404** |

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties, among other factors, may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

Report ID: 0023FY14 | Requesting BL: TRANSMISSION BUSINESS UNIT | Unit of Measure: $ Thousands

## Transmission Services Summary Statement of Revenues and Expenses

*SOY to Rate Case Comparison*

Run Date/Time: October 31, 2013/ 11:27 | Data Source: EPM Data Warehouse

| | | A | B | C |
|---|---|---|---|---|
| | | FY 2014 | | FY 2014 |
| | | Rate Case | SOY Budget | Delta: SOY - Rate Case |
| | **Operating Revenues** | | | |
| 1 | Sales | $ 880,697 | $ 885,210 | $ 4,513 |
| 2 | Miscellaneous Revenues | 34,349 | 34,357 | 8 |
| 3 | Inter-Business Unit Revenues | 111,560 | 108,273 | (3,288) |
| 4 | **Total Operating Revenues** | **1,026,607** | **1,027,840** | **1,233** |
| | **Operating Expenses** | | | |
| 5 | Transmission Operations | 140,729 | 137,877 | (2,852) |
| 6 | Transmission Maintenance | 154,233 | 154,348 | 115 |
| 7 | Transmission Engineering | 41,638 | 41,627 | (11) |
| 8 | Trans Services Transmission Acquisition and Ancillary Services | 131,287 | 144,052 | 12,765 |
| 9 | Transmission Reimbursables | 10,530 | 10,333 | (197) |
| | BPA Internal Support | | | |
| 10 | Additional Post-Retirement Contribution | 18,501 | 18,501 | - |
| 11 | Agency Services G&A | 59,927 | 62,713 | 2,786 |
| 12 | Other Income, Expenses & Adjustments | - | - | - |
| 13 | Depreciation & Amortization | 197,316 | 208,515 | 11,199 |
| 14 | **Total Operating Expenses** | **754,161** | **777,966** | **23,805** |
| 15 | **Net Operating Revenues (Expenses)** | **272,446** | **249,874** | **(22,571)** |
| | **Interest Expense and (Income)** | | | |
| 16 | Interest Expense | 190,047 | 183,343 | (6,704) |
| 17 | AFUDC | (36,477) | (32,200) | 4,277 |
| 18 | Interest Income | (9,647) | (10,921) | (1,274) |
| 19 | **Net Interest Expense (Income)** | **143,923** | **140,222** | **(3,701)** |
| 20 | **Net Revenues (Expenses)** | **$ 128,523** | **$ 109,652** | **$ (18,871)** |

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties, among other factors, may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

Report ID: 0063FY13 **Transmission Services Revenue Detail by Product** Run Date/Time: October 22, 2013 08:44

Requesting BL: TRANSMISSION BUSINESS UNIT Through the Month Ended September 30, 2013 Data Source: EPM Data Warehouse

Unit of Measure: $ Thousands Preliminary/ Unaudited % of Year Elapsed = 100%

| | | A | B | C | D |
|---|---|---|---|---|---|
| | | FY 2013 | | | FY 2013 |
| | | Rate Case | SOY Budget | Current EOY Forecast | Actuals |
| | **Transmission Services Operating Revenues** | | | | |
| | **NETWORK** | | | | |
| 1 | PTP - LONG TERM | $ 376,256 | $ 367,184 | $ 368,627 | $ 368,449 |
| 2 | NETWORK INTEGRATION | 132,022 | 126,030 | 120,360 | 122,700 |
| 3 | INTEGRATION OF RESOURCES | 25,679 | 22,191 | 22,191 | 22,191 |
| 4 | FORMULA POWER TRANSMISSION | 25,629 | 25,453 | 25,451 | 25,393 |
| 5 | PTP - SHORT TERM | 28,069 | 25,544 | 20,235 | 20,475 |
| 6 | **TOTAL: NETWORK** | **587,655** | **566,403** | **556,865** | **559,208** |
| | **ANCILLARY SERVICES** | | | | |
| 7 | SCHEDULING, SYSTEM CONTROL & DISPATCH | 95,881 | 93,798 | 92,534 | 92,611 |
| 8 | OPERATING RESERVES - SPIN & SUPP | 45,417 | 60,567 | 57,845 | 59,045 |
| 9 | VARIABLE RES BALANCING | 66,229 | 50,555 | 52,905 | 52,190 |
| 10 | REGULATION & FREQ RESPONSE | 6,513 | 6,550 | 6,435 | 6,444 |
| 11 | ENERGY & GENERATION IMBALANCE | - | 4,776 | 6,459 | 6,581 |
| 12 | DISPATCHABLE RES BALANCING | - | 3,545 | 3,139 | 3,062 |
| 13 | **TOTAL: ANCILLARY SERVICES** | **214,040** | **219,791** | **219,317** | **219,932** |
| | **INTERTIE** | | | | |
| 14 | SOUTHERN INTERTIE LONG TERM | 92,200 | 92,250 | 92,413 | 92,814 |
| 15 | SOUTHERN INTERTIE SHORT TERM | 4,463 | 5,089 | 6,262 | 4,638 |
| 16 | MONTANA INTERTIE LONG TERM | 115 | 115 | 115 | 115 |
| 17 | MONTANA INTERTIE SHORT TERM | - | - | - | 131 |
| 18 | **TOTAL: INTERTIE** | **96,777** | **97,454** | **98,790** | **97,698** |

Report ID: 0063FY13 **Transmission Services Revenue Detail by Product** Run Date/Time: October 22, 2013 08:44
Requesting BL: TRANSMISSION BUSINESS UNIT Through the Month Ended September 30, 2013 Data Source: EPM Data Warehouse
Unit of Measure: $ Thousands Preliminary/ Unaudited % of Year Elapsed = 100%

| | | A | B | C | D |
|---|---|---|---|---|---|
| | | FY 2013 | | | FY 2013 |
| | | Rate Case | SOY Budget | Current EOY Forecast | Actuals |
| | **OTHER REVENUES & CREDITS** | | | | |
| 19 | TOWNSEND-GARRISION TRANS | $ 9,796 | $ 12,421 | $ 12,357 | $ 12,352 |
| 20 | GEN INTEGRATION - OTHER REV | 8,726 | 8,709 | 8,720 | 8,725 |
| 21 | USE OF FACILITIES | 5,146 | 5,397 | 5,136 | 4,797 |
| 22 | POWER FACTOR PENALTY | 4,174 | 4,174 | 3,418 | 1,830 |
| 23 | NFP - DEPR PNW PSW INTERTIE | 3,065 | 2,943 | 3,180 | 3,262 |
| 24 | AC - PNW PSW INTERTIE - OTH REV | 1,432 | 1,553 | 1,577 | 1,465 |
| 25 | OPERATIONS & MAINT - OTHER REV | 1,145 | 1,079 | 1,049 | 1,076 |
| 26 | COE & BOR PROJECT REV | 954 | 954 | 954 | 954 |
| 27 | RESERVATION FEE - OTHER REV | 1,937 | 593 | 567 | 491 |
| 28 | TRANSMISSION SHARE IRRIGATION | 382 | 382 | 429 | 220 |
| 29 | LAND LEASES AND SALES | 301 | 301 | 280 | 245 |
| 30 | OTHER LEASES REVENUE | 106 | 106 | 100 | 116 |
| 31 | REMEDIAL ACTION - OTHER REV | 51 | 51 | 42 | 38 |
| 32 | MISC SERVICES - LOSS-EXCH-AIR | - | 100 | 143 | 753 |
| 33 | FAILURE TO COMPLY - OTHER REV | - | - | - | 700 |
| 34 | UNAUTHORIZED INCREASE - OTH REV | - | - | - | 62 |
| 35 | OTHER REVENUE SOURCES | - | - | - | 10,846 |
| 36 | **TOTAL: OTHER REVENUES & CREDITS** | **37,216** | **38,763** | **37,955** | **47,931** |
| | **FIBER & PCS** | | | | |
| 37 | FIBER OTHER REVENUE | 6,786 | 7,936 | 9,147 | 9,148 |
| 38 | WIRELESS/PCS - OTHER REVENUE | 4,861 | 4,861 | 5,486 | 5,171 |
| 39 | WIRELESS/PCS - REIMBURSABLE REV | 1,206 | 1,185 | 1,144 | 2,277 |
| 40 | FIBER OTHER REIMBURSABLE REV | 850 | 1,157 | 524 | 684 |
| 41 | **TOTAL: FIBER & PCS** | **13,704** | **15,140** | **16,301** | **17,280** |
| | **REIMBURSABLE** | | | | |
| 42 | REIMBURSABLE - OTHER REVENUE | 15,875 | 21,219 | 29,726 | 35,430 |
| 43 | ACCRUAL REIMBURSABLE | - | - | - | (2,398) |
| 44 | **TOTAL: REIMBURSABLE** | **15,875** | **21,219** | **29,726** | **33,032** |
| | **DELIVERY** | | | | |
| 45 | UTILITY DELIVERY CHARGES | 2,969 | 2,765 | 2,338 | 2,161 |
| 46 | DSI DELIVERY | 1,785 | 1,785 | 2,630 | 2,630 |
| 47 | **TOTAL: DELIVERY** | **4,753** | **4,550** | **4,968** | **4,791** |
| 48 | **TOTAL: Transmission Services Operating Revenues** | **$ 970,021** | **$ 963,319** | **$ 963,922** | **$ 979,873** |

**Report ID: 0021FY13** | **Requesting BL: POWER BUSINESS UNIT** | **Unit of measure: $ Thousands**

## Power Services Summary Statement of Revenues and Expenses

**Through the Month Ended September 30, 2013**
**Preliminary/ Unaudited**

**Run Date/Time: October 21, 2013 04:47** | **Data Source: EPM Data Warehouse** | **% of Year Elapsed = 100%**

| | | A | B | C | D <Note 1 | E |
|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals: FYTD |
| | **Operating Revenues** | | | | | |
| 1 | Gross Sales (excluding bookout adjustment) <Note 2 | $ 2,450,595 | $ 2,501,672 | $ 2,407,477 | $ 2,457,974 | $ 2,438,468 |
| 2 | Bookout Adjustment to Sales | (61,972) | - | - | (58,870) | (66,587) |
| 3 | Miscellaneous Revenues | 26,412 | 26,335 | 27,181 | 26,544 | 28,013 |
| 4 | Inter-Business Unit | 134,716 | 131,078 | 138,442 | 140,828 | 143,689 |
| 5 | U.S. Treasury Credits | 81,583 | 100,447 | 85,999 | 92,777 | 88,692 |
| 6 | **Total Operating Revenues** | **2,631,334** | **2,759,531** | **2,659,099** | **2,659,253** | **2,632,274** |
| | **Operating Expenses** | | | | | |
| | Power System Generation Resources | | | | | |
| | Operating Generation Resources | | | | | |
| 7 | Columbia Generating Station | 292,636 | 345,945 | 338,267 | 330,147 | 330,066 |
| 8 | Bureau of Reclamation | 89,005 | 119,891 | 132,391 | 128,691 | 127,116 |
| 9 | Corps of Engineers | 206,967 | 215,700 | 215,700 | 215,700 | 208,096 |
| 10 | Long-term Contract Generating Projects | 25,869 | 25,831 | 26,008 | 23,490 | 22,518 |
| 11 | Operating Generation Settlement Payment | 20,437 | 22,148 | 20,785 | 22,121 | 22,122 |
| 12 | Non-Operating Generation | 2,153 | 1,948 | 2,316 | (22,400) | (25,878) |
| 13 | Gross Contracted Power Purchases and Aug Power Purchases | 205,350 | 164,905 | 119,364 | 191,973 | 220,987 |
| 14 | Bookout Adjustment to Power Purchases | (61,972) | - | - | (58,870) | (66,587) |
| 15 | Residential Exchange/IOU Settlement Benefits <Note 2 | 203,712 | 201,760 | 203,200 | 202,689 | 201,933 |
| 16 | Renewables | 34,018 | 38,142 | 38,140 | 36,140 | 30,463 |
| 17 | Generation Conservation | 37,505 | 47,850 | 47,850 | 41,396 | 36,078 |
| 18 | **Subtotal Power System Generation Resources** | **1,055,679** | **1,184,120** | **1,144,021** | **1,111,077** | **1,106,913** |
| 19 | Power Services Transmission Acquisition and Ancillary Services | 175,873 | 157,185 | 158,498 | 164,499 | 162,351 |
| 20 | Power Non-Generation Operations | 79,919 | 90,255 | 89,582 | 84,121 | 79,302 |
| 21 | Fish and Wildlife/USF&W/Planning Council/Environmental Requirements | 280,197 | 281,639 | 283,157 | 282,194 | 277,802 |
| | BPA Internal Support | | | | | |
| 22 | Additional Post-Retirement Contribution | 17,243 | 17,821 | 17,243 | 17,821 | 17,820 |
| 23 | Agency Services G&A | 52,789 | 52,662 | 52,586 | 53,949 | 52,108 |
| 24 | Other Income, Expenses & Adjustments | 107 | - | - | 702 | (127) |
| 25 | Non-Federal Debt Service | 561,308 | 541,586 | 520,504 | 518,504 | 518,536 |
| 26 | Depreciation & Amortization | 199,286 | 214,327 | 211,403 | 218,978 | 223,172 |
| 27 | **Total Operating Expenses** | **2,422,400** | **2,539,594** | **2,476,994** | **2,451,844** | **2,437,878** |
| 28 | **Net Operating Revenues (Expenses)** | **208,934** | **219,937** | **182,105** | **207,409** | **194,397** |
| | **Interest Expense and (Income)** | | | | | |
| 29 | Interest Expense | 208,884 | 251,792 | 224,430 | 235,738 | 235,578 |
| 30 | AFUDC | (8,835) | (13,592) | (13,410) | (11,235) | (10,674) |
| 31 | Interest Income | (30,301) | (16,756) | (11,500) | (16,617) | (15,444) |
| 32 | **Net Interest Expense (Income)** | **169,748** | **221,444** | **199,520** | **207,886** | **209,460** |
| 33 | **Net Revenues (Expenses)** | **$ 39,185** | **$ (1,507)** | **$ (17,415)** | **$ (476)** | **$ (15,064)** |

**Power Services ANR as-of 3rd Quarter Forecast FY2013 (in Millions) ($0.5)**

| | ANR = $-0.5 | |
|---|---|---|
| CRAC: ANR ≤ ($185.5) | No CRAC or DDC | DDC: ANR ≥ $564.5 |

<Note 3

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties, among other factors, may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

<2 The Residential Exchange Program expenses reflect the Scheduled Amount of REP benefits payments established in the 2012 REP Settlement Agreement. The Scheduled Amount of REP benefit payments incorporates a $76,537,617 reduction in REP benefits to provide Refund Amount payments to COUs. The Refund Amount returned to the COUs is reflected through a reduction in the Gross Sales amount.

<3 Accumulated Net Revenue (ANR) for 2013 is the current forecast of Power Services Net Revenue for 2013. The Cost Recovery Adjustment Clause (CRAC) is an upward adjustment to certain rates that would apply during FY2014. The Dividend Distribution Clause (DDC) is a downward adjustment to certain rates that would apply during FY2014. For more information on ANR, CRAC or DDC, please refer to pages 39-49 of the 2014 Wholesale Power and Transmission Rate Adjustment Proceeding (BP-14), Appendix A: Power Rate Schedules (BP-14-A-03-AP01-CC01) http://www.bpa.gov/Finance/RateCases/BP-14RateAdjustmentProceeding/BP14FinalProposal/BP-14-A-03-AP01-CC01.pdf

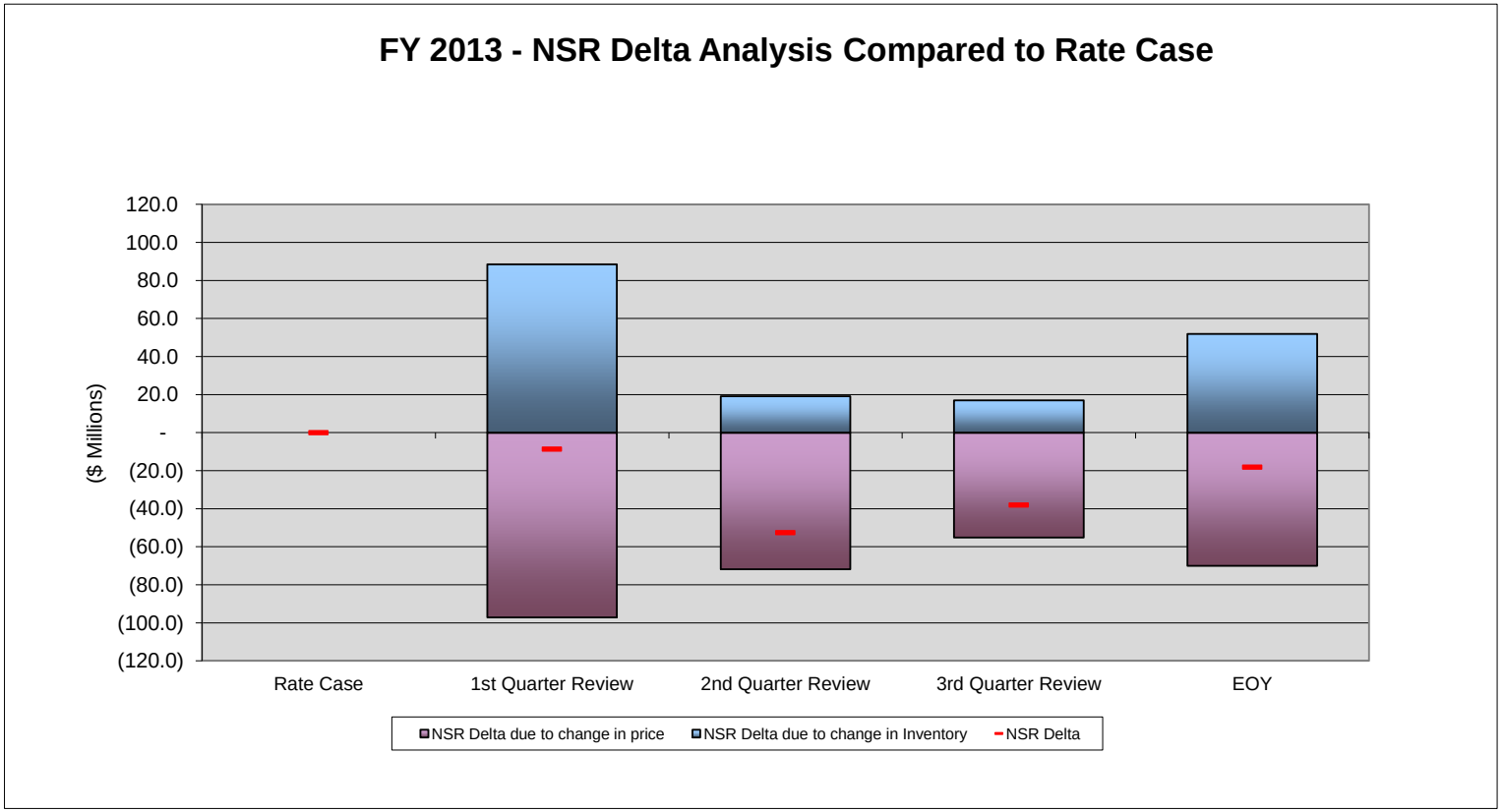
**Report ID: 0021FY14** | **Power Services Summary Statement of Revenues and Expenses** | **Run Date/Time: October 21, 2013 17:50**
**Requesting BL: POWER BUSINESS UNIT** | ***SOY to Rate Case Comparison*** | **Data Source: EPM Data Warehouse**
**Unit of measure: $ Thousands**

| | | A | B | C |
|---|---|---|---|---|
| | | FY 2014 | | FY 2014 |
| | | Rate Case | SOY Budget | Delta: SOY - Rate Case |
| | **Operating Revenues** | | | |
| 1 | Gross Sales (excluding bookout adjustment) <Note 2 | $ 2,434,517 | $ 2,450,597 | $ 16,080 |
| 2 | Bookout Adjustment to Sales | - | - | - |
| 3 | Miscellaneous Revenues | 29,689 | 35,816 | 6,127 |
| 4 | Inter-Business Unit | 117,696 | 128,405 | 10,709 |
| 5 | U.S. Treasury Credits | 101,773 | 101,773 | - |
| 6 | **Total Operating Revenues** | **2,683,675** | **2,716,591** | **32,916** |
| | **Operating Expenses** | | | |
| | Power System Generation Resources | | | |
| | Operating Generation Resources | | | |
| 7 | Columbia Generating Station | 298,751 | 300,514 | 1,763 |
| 8 | Bureau of Reclamation | 140,601 | 140,601 | - |
| 9 | Corps of Engineers | 225,687 | 225,687 | - |
| 10 | Long-term Contract Generating Projects | 25,999 | 25,284 | (715) |
| 11 | Operating Generation Settlement Payment | 21,405 | 21,405 | - |
| 12 | Non-Operating Generation | 2,206 | 2,400 | 194 |
| 13 | Gross Contracted Power Purchases and Aug Power Purchases | 76,915 | 95,444 | 18,529 |
| 14 | Bookout Adjustment to Power Purchases | - | - | - |
| 15 | Residential Exchange/IOU Settlement Benefits <Note 2 | 201,919 | 201,919 | - |
| 16 | Renewables | 39,799 | 39,807 | 8 |
| 17 | Generation Conservation | 48,408 | 55,760 | 7,353 |
| 18 | **Subtotal Power System Generation Resources** | **1,081,689** | **1,108,822** | **27,133** |
| 19 | Power Services Transmission Acquisition and Ancillary Services | 164,845 | 164,311 | (534) |
| 20 | Power Non-Generation Operations | 92,156 | 89,980 | (2,176) |
| 21 | Fish and Wildlife/USF&W/Planning Council/Environmental Requirements | 295,238 | 295,238 | - |
| | BPA Internal Support | | | |
| 22 | Additional Post-Retirement Contribution | 18,501 | 18,501 | - |
| 23 | Agency Services G&A | 55,102 | 59,353 | 4,251 |
| 24 | Other Income, Expenses & Adjustments | - | - | - |
| 25 | Non-Federal Debt Service | 514,848 | 515,983 | 1,135 |
| 26 | Depreciation & Amortization | 224,447 | 227,870 | 3,423 |
| 27 | **Total Operating Expenses** | **2,446,827** | **2,480,057** | **33,231** |
| 28 | **Net Operating Revenues (Expenses)** | **236,848** | **236,534** | **(315)** |
| | **Interest Expense and (Income)** | | | |
| 29 | Interest Expense | 254,797 | 255,092 | 295 |
| 30 | AFUDC | (11,168) | (11,900) | (732) |
| 31 | Interest Income | (15,845) | (13,894) | 1,951 |
| 32 | **Net Interest Expense (Income)** | **227,784** | **229,298** | **1,514** |
| 33 | **Net Revenues (Expenses)** | **$ 9,065** | **$ 7,236** | **$ (1,829)** |

**Report ID: 0064FY13** | **Power Services Detailed Statement of Revenues by Product** | **Run Date\Time: October 22, 2013 08:43**
**Requesting BL: POWER BUSINESS UNIT** | **Through the Month Ended September 30, 2013** | **Data Source: EPM Data Warehouse**
**Unit of Measure: $ Thousands** | **Preliminary/ Unaudited** | **% of Year Elapsed = 100%**

| | | A | B | C | D |
|---|---|---|---|---|---|
| | | FY 2013 | | FY 2013 | FY 2013 |
| | | Rate Case | SOY Budget | Actuals | Actuals per Rate Case |
| | **Operating Revenues** | | | | |
| | **Gross Sales (excluding bookout adjustment)** | | | | |
| | **PF Tier 1 Revenues** | | | | |
| | **Load Following** | | | | |
| 1 | Composite | $ 1,049,506 | $ 1,049,506 | $ 1,049,107 | 100% |
| 2 | Non-Slice | (208,995) | (208,995) | (208,916) | 100% |
| 3 | Load Shaping | (12,268) | (3,792) | (38,103) | 311% |
| 4 | Demand | 61,269 | 60,262 | 34,759 | 57% |
| 5 | Discounts / Fees | (44,009) | (44,009) | (34,493) | 78% |
| 6 | RSS / RSC | 240 | 240 | 573 | 239% |
| 7 | REP Refund | (33,036) | (33,036) | (33,036) | 100% |
| 8 | Other | - | - | (153) | 0% |
| 9 | **Sub-Total: Load Following** | 812,707 | 820,176 | 769,739 | 95% |
| | **Block** | | | | |
| 10 | Composite | 597,416 | 597,416 | 602,931 | 101% |
| 11 | Non-Slice | (118,967) | (118,967) | (120,065) | 101% |
| 12 | Load Shaping | 1,012 | 858 | 779 | 77% |
| 13 | Demand | - | - | - | 0% |
| 14 | Discounts / Fees | (4,963) | (4,963) | (9,319) | 188% |
| 15 | RSS / RSC | - | - | - | 0% |
| 16 | REP Refund | (21,459) | (21,459) | (21,459) | 100% |
| 17 | Other | - | - | (324) | 0% |
| 18 | **Sub-Total: Block** | 453,039 | 452,885 | 452,542 | 100% |
| | **Slice** | | | | |
| 19 | Composite | 629,081 | 629,081 | 629,084 | 100% |
| 20 | Slice | - | - | - | 0% |
| 21 | Discounts / Fees | (3,277) | (3,277) | (2,757) | 84% |
| 22 | REP Refund | (22,042) | (22,042) | (22,042) | 100% |
| 23 | Other | - | - | - | 0% |
| 24 | **Sub-Total: Slice** | 603,762 | 603,762 | 604,286 | 100% |
| 25 | **PF Tier 2 Revenues** | 24,123 | 24,123 | 24,125 | 100% |
| 26 | **NR Revenues** | - | - | - | 0% |
| 27 | **IP Revenues** | 108,334 | 101,772 | 101,159 | 93% |
| 28 | **FPS Revenues** | 461,508 | 374,584 | 484,221 | 105% |
| 29 | **Other Revenues** | 38,199 | 30,175 | 2,396 | 6% |
| 30 | **Gross Sales (excluding bookout adjustment)** | 2,501,672 | 2,407,477 | 2,438,468 | 97% |
| 31 | **Bookout Adjustment to Sales** | - | - | (66,587) | 0% |
| 32 | **Miscellaneous Revenues** | 26,335 | 27,181 | 28,013 | 106% |
| 33 | **Inter-Business Unit** | 131,078 | 138,442 | 143,689 | 110% |
| 34 | **U.S. Treasury Credits** | 100,447 | 85,999 | 88,692 | 88% |
| **35** | **Total Operating Revenues** | **2,759,531** | **2,659,099** | **2,632,274** | **95%** |

# NSR Delta Analysis – Price/Inventory Comparison

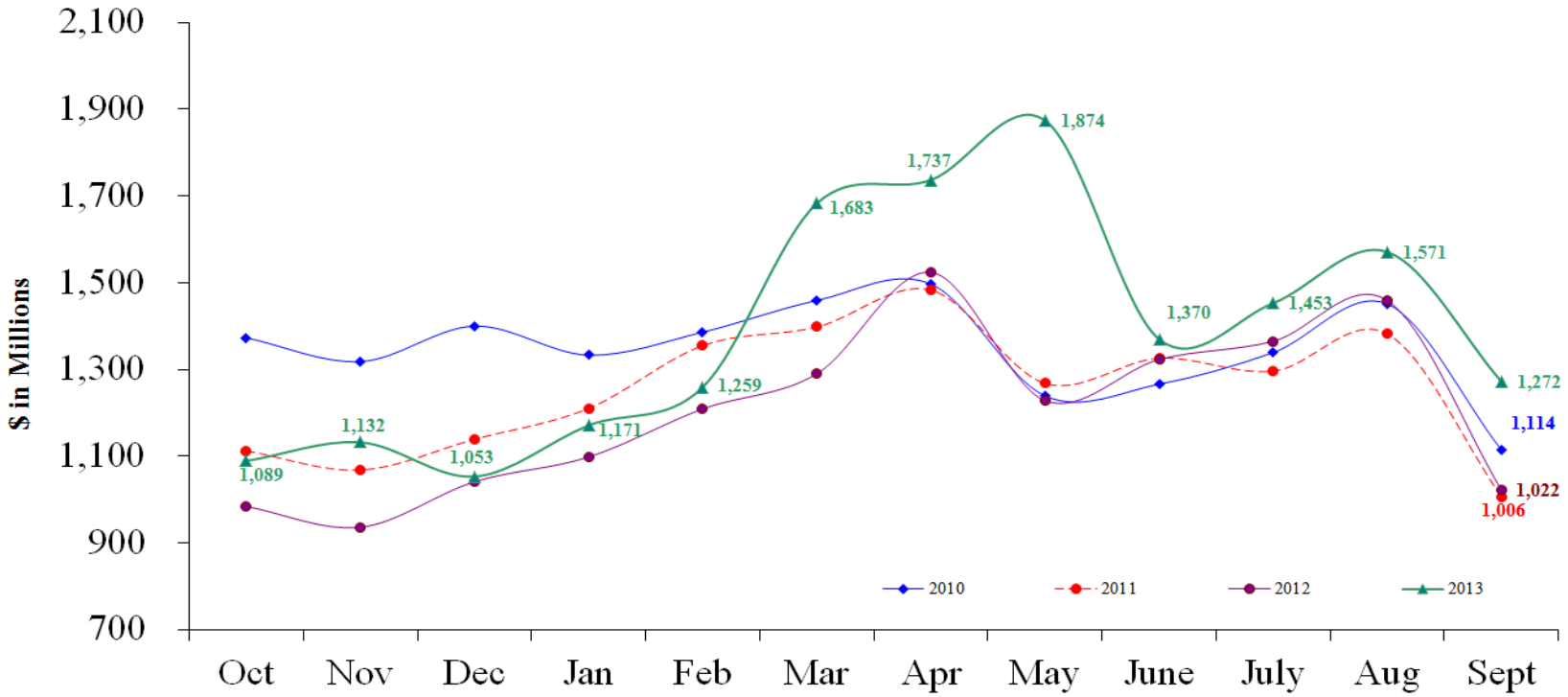



| Delta Analysis compared to Rate Case ($ Millions) | Rate Case | 1st Quarter Review | 2nd Quarter Review | 3rd Quarter Review | EOY |
|---|---|---|---|---|---|
| **Net Secondary Revenue Forecast** | 363.6 | 355.0 | 311.0 | 368.2 | 345.5 |
| NSR Delta | - | (8.6) | (52.6) | (38.1) | (18.1) |
| NSR Delta due to change in price | - | (97.1) | (71.8) | (55.1) | (70.0) |
| NSR Delta due to change in Inventory | - | 88.5 | 19.2 | 17.0 | 51.9 |

1) Inventory shape can cause lower average price of power, or "unit value of inventory". In this analysis, these changes are classified as changes due to price.
2) Rate Case reflects an Adjusted Rate Case NSR removing $66 million in augmentation expense (BP-12 Rate Case).

# Financial Reserves

## Reserves as of the end of September 2013 are $1,272 million

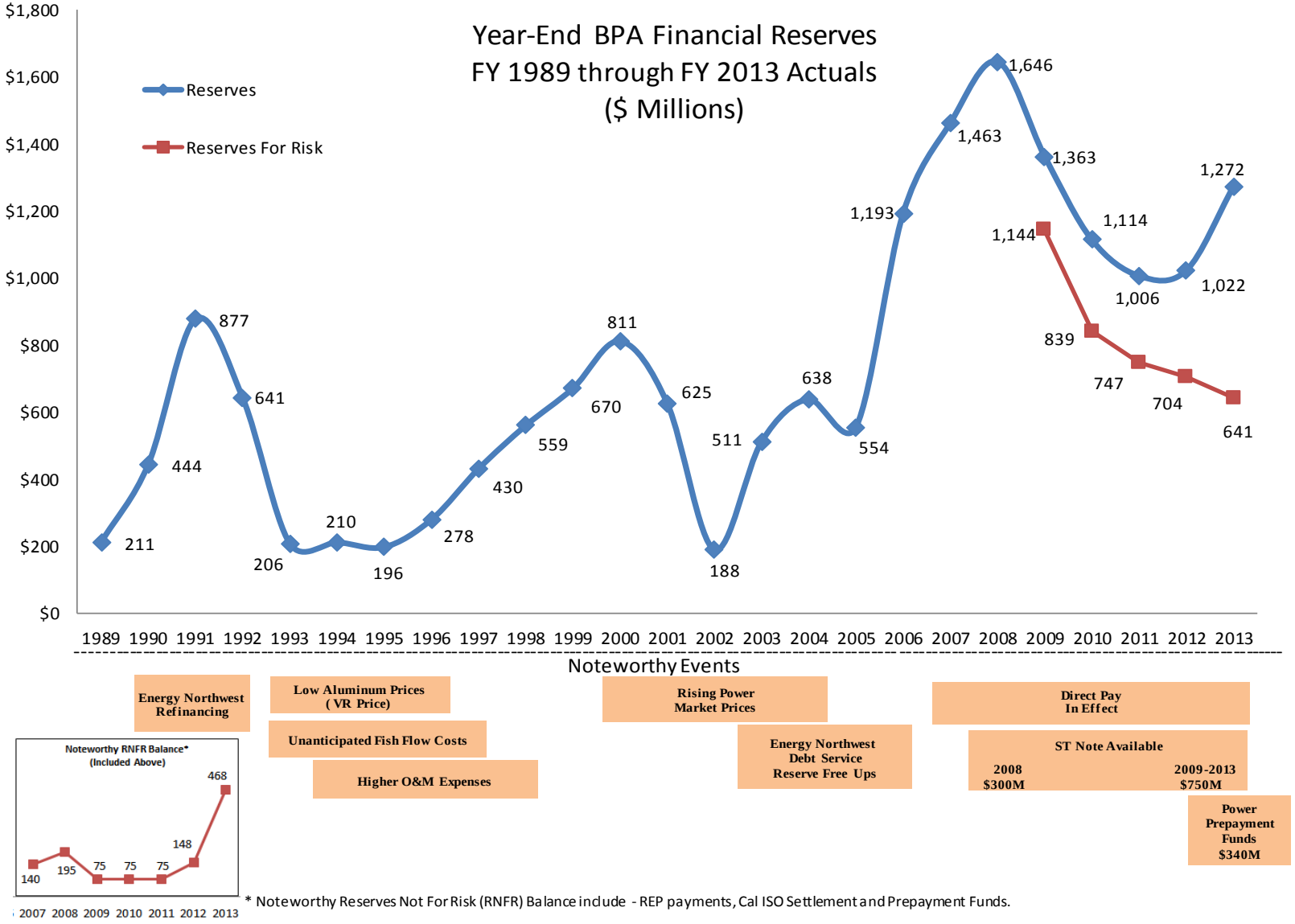



*Unaudited*

Q4 - End of FY13 Reserves

| | Split | | |
|---|---|---|---|
| ($ Millions) | Power | Trans | Total |
| End FY13 Reserves | 693 | 579 | 1,272 |
| Less: End of FY13 Reserves Not for Risk | 511 | 120 | 631 |
| Reserves Available for Risk | 182 | 459 | 641 |

# BPA Financial Reserves FY 1989 - FY 2013




* Noteworthy Reserves Not For Risk (RNFR) Balance include - REP payments, Cal ISO Settlement and Prepayment Funds.



*This information has been made publicly available by BPA on October 31, 2013 and does not contain BPA-approved Financial Information.*

# Reserves Breakout FY 2012 - FY 2013

| Historic Agency Reserves ($ Millions) | | |
|---|---|---|
| **Reserves For Risk (A)** | | |
| | 2012 | 2013 |
| Power | 236 | 182 |
| Trans | 468 | 459 |
| **Total** | 704 | 641 |
| **Reserves Not For Risk (B)** | | |
| | 2012 | 2013 |
| Power | 193 | 511 |
| Trans | 125 | 120 |
| **Total** | 318 | 631 |
| **Agency Reserves (A+B)** | | |
| | 2012 | 2013 |
| Power | 429 | 693 |
| Trans | 593 | 579 |
| **Total** | 1,022 | 1,272 |

# Slice Reporting
# Composite Cost Pool Review
# Forecast of Annual Slice True-Up Adjustment

Craig Larson
Public Utilities Specialist

# Q4 Forecast of FY 2013 Slice True-Up Adjustment

| | **FY 2013 Forecast $ in thousands** |
|---|---|
| February 5, 2013<br>First Quarter Business Review | ($6,716) |
| April 30, 2013<br>Second Quarter Business Review | ($7,795) |
| July 30, 2013<br>Third Quarter Business Review | ($18,549) |
| **November 5, 2013**<br>**Fourth Quarter Business Review** | **($31,302)** |
| Actual Slice True-Up Adjustment Charge/Credit<br>(negative amount = credit on bill) | |

# Summary of Differences
# From Q4 Forecast to FY 2013 (BP-12)

| # | | Composite Cost Pool True-Up Table Reference | Q4 – FY 13 $ in thousands |
|---|---|---|---|
| 1 | Total Expenses | Row 118 | ($104,668) |
| 2 | Total Revenue Credits | Rows 137 + 146 | $4,267 |
| 3 | Minimum Required Net Revenue | Row 156 | ($3,612) |
| 4 | TOTAL Composite Cost Pool (1 - 2 + 3)<br>($104.668M) – $4.267M + ($3.612M) = ($112.547M) | Row 158 | ($112,547) |
| 5 | TOTAL in line 4 divided by 0.9655308 sum of TOCAs<br>($112.547M) / (0.9655308) = ($116.565M) | Row 163 | ($116,565) |
| 6 | **Q4 Forecast of FY 13 True-up Adjustment**<br>**26.85407 percent of Total in line 5**<br>**.2685407 * ($116.565M) = ($31.302M)** | Row 164 | **($31,302)** |

# Lower Level Differences From Q4 Forecast to FY 2013 (BP-12)

| # | Line Item of Values Changed Over $5M | Composite Cost Pool True-Up Table Reference | Q4 – FY 2013 Rate Case ($ in thousands) |
|---|---|---|---|
| 1 | Columbia Generating Station | Row 4 | $ (15,879) |
| 2 | Bureau of Reclamation | Row 5 | $ 7,225 |
| 3 | Corps of Engineers | Row 6 | $ (7,604) |
| 4 | Trojan Decommissioning | Row 15 | $ (27,985) |
| 5 | Gross Other Power Purchases | Row 21 | $ 12,399 |
| 6 | Renewables R&D | Row 33 | $ (5,939) |
| 7 | Renewables (excludes KIII) | Row 35 | $ (6,875) |
| 8 | Conservation Acquisition | Row 40 | $ (5,556) |
| 9 | Energy Efficiency Revenues | Row 42 | $ (6,132) |
| 10 | Power R&D | Row 63 | $ 6,186 |
| 11 | WNP-1 DEBT SVC | Row 96 | $ (14,441) |
| 12 | WNP-3 DEBT SVC | Row 97 | $ (5,080) |
| 13 | Amortization | Row 109 | $ 6,052 |
| 14 | Net Interest Expense | Row 113 | $ (15,945) |
| 15 | Generation Inputs | Row 121 | $ 12,611 |
| 16 | 4(h)(10)(c) credit | Row 123 | $ (11,754) |
| 17 | Energy Efficiency Revenues | Row 125 | $ (5,808) |
| 18 | Non-Federal Int. Exp. (prepay) | Row 152a | $ (12,750) |
| 19 | Prepayment Credits | Row 152b | $ 7,653 |

# Contra-Expense and Reinvestments of Green Energy Premiums

## Summary of Contra Expense (carry over from Fiscal Year 2012) and reinvestments

| Description on Composite Cost Pool True-Up Table | Reference - Composite Cost Pool True-Up Table | ($000) Rate Period | ($000) RATE CASE FY2013 |
|---|---|---|---|
| Contra Expense - Final Rate Case estimate of Green Energy Premium revenues remaining for reinvestment at the end of FY 2011 | Row 34 | $ (5,249) | $ (2,625) |
| Contra Expense - Actual final amount of Green Energy Premium revenues remaining for reinvestment at the end of FY 2011 Note 1 | Row 34 | $ (6,485) | $ (3,243) |
| Reinvestment Totals from FY 2012 | Row 34 | $ 2,692 | |
| Remaining Contra Expense in FY 2013 (carry over from FY2012) | Row 34 | $ (3,793) | |
| **Actual Projects** | | Actuals FY2013 | Forecast for FY2013 |
| Eligible Reinvestments in 2013 | | | |
| SUBTOTAL - Power R&D - Other eligible projects | Row 63 | $ 878 | $ 868 |
| Power R&D - Smart Grid @ 75% of actuals Note 2 | Row 63 | $ 1,153 | $ 1,275 |
| Operations Planning - WIT | Row 60 | $ 538 | $ 646 |
| Reinvestment Totals for fiscal year 2013 | | $ 2,570 | $ 2,789 |
| Contra Expense to date for Fiscal year 2013 | | $ (2,570) | |

Note 1: The Actual Contra Expense is limited to Actual reinvestments

Note 2: This is 75% of the total amount

# Composite Cost Pool Interest Credit and Prepay Offset Credit

| | Allocation of Interest Earned on the Bonneville Fund ($ in thousands) | | |
|---|---|---|---|
| | | Q3 2013 | Final EOY 2013 |
| 1 | Reserves Prior to FY 2002 | 570,255 | 570,255 |
| 2 | Adjustments for pre-2002 Items | - | - |
| 3 | Reserves for Composite Cost Pool (Line 1 + Line 2) | 570,255 | 570,255 |
| 4 | Composite Interest Rate | 2.24% | 2.25% |
| 5 | Composite Interest Credit | (12,800) | (12,835) |
| 6 | Power Offset Credit | (6,415) | (6,467) |
| 7 | Total Interest Credit for Power Services | (16,620) | (15,444) |
| 8 | Non-Slice Interest Credit (Line 7 - (Line 5+6)) | 2,595 | 3,859 |

# Net Interest Expense in Slice True-Up Forecast

| | *$ in thousands* **2013 Rate Case** | *$ in thousands* Actual 2013 |
|---|---|---|
| ▪ Federal Appropriation | $222,715 | $218,164 |
| ▪ Capitalization Adjustment | ($45,937) | ($45,937) |
| ▪ Borrowings from US Treasury | $ 75,015 | $ 55,698 |
| ▪ Prepay Interest Expense | $ 0 | $ 7,653 |
| ▪ Interest Expense | $251,793 | $235,578 |
| ▪ AFUDC | ($13,592) | ( $10,674) |
| ▪ Interest Income (composite) | ($17,871) | ( $12,835) |
| ▪ Prepay Offset Credit | $ (0) | ($ 6,467) |
| ▪ Total Net Interest Expense | $220,330 | $ 205,601 rounding |

- Note 1: $220,330 is the combination of $221,546 on Row 113 and ($1,216) on Row 114 in the Composite Cost Pool True-Up Table FY 2013 Rate Case Column. To calculate the Net Interest Expense for the Annual Slice True-Up Adjustment, the non-slice interest income is excluded.

# FY 2013 End of Year Capital Financial Results & FY 2014 SOY Budget

Report ID: 0027FY13
Requesting BL: CORPORATE BUSINESS UNIT
Unit of Measure: $Thousands

## BPA Statement of Capital Expenditures

FYTD Through the Month Ended September 30, 2013
Preliminary Unaudited

Run Date/Run Time: October 21, 2013/ 04:51
Data Source: EPM Data Warehouse
% of Year Elapsed = 100%

| | | A | B | C | D | E |
|---|---|---|---|---|---|---|
| | | FY 2013 | | FY 2013 | FY 2013 | |
| | | SOY Budget | Current EOY Forecast | Actuals: FYTD | Actuals / SOY Budget | Actuals / Forecast |
| | **Transmission Business Unit** | | | | | |
| 1 | MAIN GRID | $ 160,391 | $ 84,090 | $ 87,006 | 54% | 103% |
| 2 | AREA & CUSTOMER SERVICE | 23,103 | 12,641 | 13,791 | 60% | 109% |
| 3 | SYSTEM REPLACEMENTS | 227,542 | 214,807 | 190,294 | 84% | 89% |
| 4 | UPGRADES & ADDITIONS | 255,246 | 204,325 | 196,816 | 77% | 96% |
| 5 | ENVIRONMENT CAPITAL | 6,483 | 8,110 | 7,791 | 120% | 96% |
| | PFIA | | | | | |
| 6 | MISC. PFIA PROJECTS | 12,520 | 10,616 | 10,151 | 81% | 96% |
| 7 | GENERATOR INTERCONNECTION | 38,862 | (240) | (2,446) | -6% | 1020% |
| 8 | SPECTRUM RELOCATION | 1,296 | 914 | 1,044 | 81% | 114% |
| 9 | CAPITAL INDIRECT | - | - | 1,259 | 0% | 0% |
| 10 | LAPSE FACTOR | (72,273) | - | - | 0% | 0% |
| 11 | **TOTAL Transmission Business Unit** | 653,169 | 535,263 | 505,706 | 77% | 94% |
| | **Power Business Unit** | | | | | |
| 12 | BUREAU OF RECLAMATION | 64,546 | 71,179 | 67,539 | 105% | 95% |
| 13 | CORPS OF ENGINEERS | 172,635 | 144,774 | 138,886 | 80% | 96% |
| 14 | GENERATION CONSERVATION | 82,170 | 81,000 | 78,376 | 95% | 97% |
| 15 | POWER INFORMATION TECHNOLOGY | 5,885 | 7,000 | 5,881 | 100% | 84% |
| 16 | FISH & WILDLIFE | 67,145 | 60,002 | 52,120 | 78% | 87% |
| 17 | LAPSE FACTOR | (12,417) | - | - | 0% | 0% |
| 18 | **TOTAL Power Business Unit** | 379,964 | 363,955 | 342,802 | 90% | 94% |
| | **Corporate Business Unit** | | | | | |
| 19 | CORPORATE BUSINESS UNIT | 48,649 | 34,274 | 34,577 | 71% | 101% |
| 20 | **TOTAL Corporate Business Unit** | 48,649 | 34,274 | 34,577 | 71% | 101% |
| 21 | **TOTAL BPA Capital Expenditures** | $ 1,081,782 | $ 933,493 | $ 883,086 | 82% | 95% |

Report ID: 0027FY14
Requesting BL: CORPORATE BUSINESS UNIT
Unit of Measure: $Thousands

## BPA Statement of Capital Expenditures

*FY2014 Start of Year Budget*

Run Date/Run Time: October 23, 2013/ 10:43
Data Source: EPM Data Warehouse

| | | A<br>FY 2014<br>SOY Budget |
|---|---|---|
| | **Transmission Business Unit** | |
| 1 | MAIN GRID | $ 131,305 |
| 2 | AREA & CUSTOMER SERVICE | 27,133 |
| 3 | SYSTEM REPLACEMENTS | 233,973 |
| 4 | UPGRADES & ADDITIONS | 256,548 |
| 5 | ENVIRONMENT CAPITAL | 6,804 |
| | PFIA | |
| 6 | MISC. PFIA PROJECTS | 4,802 |
| 7 | GENERATOR INTERCONNECTION | 10,118 |
| 8 | SPECTRUM RELOCATION | 200 |
| 9 | CAPITAL INDIRECT | - |
| 10 | LAPSE FACTOR | (33,158) |
| 11 | **TOTAL Transmission Business Unit** | 637,724 |
| | **Power Business Unit** | |
| 12 | BUREAU OF RECLAMATION | 78,181 |
| 13 | CORPS OF ENGINEERS | 159,461 |
| 14 | GENERATION CONSERVATION | 75,200 |
| 15 | POWER INFORMATION TECHNOLOGY | 9,726 |
| 16 | FISH & WILDLIFE | 60,275 |
| 17 | LAPSE FACTOR | (11,882) |
| 18 | **TOTAL Power Business Unit** | 370,961 |
| | **Corporate Business Unit** | |
| 19 | CORPORATE BUSINESS UNIT | 30,060 |
| 20 | **TOTAL Corporate Business Unit** | 30,060 |
| 21 | **TOTAL BPA Capital Expenditures** | $ 1,038,745 |

Updated 11/4

# Capital Project Status Report

Dennis Naef
Asset Strategist

## Major Capital Projects[1] - End-of-Project Target Performance

Q3 2013

| Project | Description | Direct Capital $M[2] Target | Direct Capital $M[2] Forecast | Direct Capital $M[2] Actual[3] | In-Service Date Target | In-Service Date Forecast |
|---|---|---|---|---|---|---|
| **Transmission** | | | | | | |
| Spacer Damper Replacement Program (FY08-12) | Replace all spring type double and triple bundle spacer-dampers on the 500 kV system. | $ 65.2 | $ 46.3 | $ 45.2 | 9/30/2012 for 95% completion | 9/30/14 |
| Sustain Steel Program Defective Damper Replacements | Replace approximately 1,700 mile of defective PPI spacer dampers. | $24.0 to $30.0 for FY12-FY13 | $ 25.6 | $ 19.7 | 90% to 113% of workplan thru FY13 | Achieve 89% of workplan thru FY13 |
| Spectrum Relocation (3G 1710-1755 MHz Project) | Vacate radio frequencies as required by P.L. 108-494. | $ 48.6 | $ 40.6 | $ 40.0 | 3/31/13 | 12/1/13 |
| 500 kV Spare Transformer Project | Acquire 5 spares and relocate 2 existing transformers to be used as spares. The spares will be placed strategically across the system. | $ 41.0 | $ 43.0 | $ 34.5 | 12/31/13 | 9/30/14 |
| FY10 - TEAP Fleet Equipment Replacement Program | Heavy duty and specialized vehicle replacement program for FY10, FY11 and part of FY12. | $ 29.6 | $ 28.0 | $ 24.8 | 3/31/12 | 9/30/13 |
| #KC SONET Phase II Spur Healing | Complete the digital microwave and radio conversion in Oregon. | $ 18.0 | $ 17.4 | $ 11.3 | 12/31/15 | 12/31/15 |
| #NC Analog Microwave Replacement | Complete the digital microwave and radio conversion in NW Washington. | $ 13.6 | $ 10.5 | $ 6.2 | 12/31/15 | 12/15/14 |
| Alvey Substation 500 kV Shunt Reactor | Add a 500 kV shunt reactor for voltage stabilization. | $ 10.9 | $ 10.5 | $ 3.6 | 4/30/12 | 3/9/15 |
| NEPA - I-5 Corridor Reinforcement | Conduct NEPA study, preliminary engineering and design. | $ 45.0 | $ 43.8 | $ 32.4 | 1/31/13 | 12/15/14 |
| West of McNary Reinforcement Group 2 Big Eddy - Knight | New 500 kV substation and 28 miles of 500 kV transmission line. | $ 180.0 | $ 181.3 | $ 145.6 | Substation Energized 3/31/2013 Reactor Energized 11/30/14 | Substation Energized 8/31/2015 Reactor Energized 11/30/14 |
| Condon Wind Voltage Control | Install ring bus, transformer bank and breaker to control voltage fluctuations on the DeMoss-Fossil-Maupin 69kV line. | $ 9.4 | $ 14.3 | $ 14.1 | 5/31/11 | 9/30/13 |
| DC RAS Upgrade | Replace the DC RAS controllers at Celilo with upgraded units at the Ross and Munro control centers. | $ 11.8 | $ 11.3 | $ 9.8 | 11/30/13 | 11/30/13 |
| Synchrophasor Project | 5-year effort to acquire, install, test, and implement synchronized Wide Area Measurement (WAM) and control technology at BPA. | $ 32.5 | $ 30.7 | $ 24.5 | Phase I complete by 9/30/13. | Phase I complete by 9/30/13. |
| Wood Pole Line Sustain Program FY10 - FY13 | Implement a stable, sustained wood pole replacement program. The four year plan includes cumulative cost and work plan completion targets. | $108.6 to $135.8 for FY10 - FY13 | $ 128.2 | $ 119.2 | 90% to 100% of workplan and 420 miles | <80% of workplan and 278 miles |

This information has been made publicly available by BPA on 8/13/2013 and does not contain Agency-approved Financial Information.

[1] Includes capital projects authorized at the agency level since August 2007

[2] Direct capital costs exclude AFUDC and overheads

[3] Actual costs are project costs to date.

[4] Contracts have not been awarded - cost estimates are confidential

## Major Capital Projects[1] - End-of-Project Target Performance

Q3 2013

| Project | Description | Direct Capital $M[2] Target | Direct Capital $M[2] Forecast | Direct Capital $M[2] Actual[3] | In-Service Date Target | In-Service Date Forecast |
|---|---|---|---|---|---|---|
| **Transmission - continued** | | | | | | |
| Steel Lines Sustain Program FY11 - FY13 | Implement a stable, sustained steel line replacement program. The four year plan includes cumulative cost and work plan completion targets. | $22.4 to $28.0 for FY11 - FY13 | $ 32.1 | $ 25.8 | Achieve 90% to 150% of workplan | Forecast to achieve 102% of workplan |
| System Protection and Control (SPC) Sustain Program FY11 - FY13 | Implement a stable, sustained SPC replacement program. The four year plan includes cumulative cost and work plan completion targets. | $37.7 to $47.2 for FY11- | $ 27.1 | $ 17.1 | Achieve 90% to 100% of | 42% |
| Control Replacement California - Oregon Intertie (COI) Series Capacitors | Replace protection and control systems for the series capacitor banks. Target includes 20% other owner's share. | $ 15.7 | $ 12.0 | $ 10.7 | 3/30/14 | 2/11/14 |
| Ross - Schultz Fiber Replacement | Replace the obsolete and limited 36 strand fiber with standard 72 strand fiber. | $ 34.0 | $ 33.7 | $ 2.0 | 9/15/17 | 9/15/17 |
| #DC Microwave Analog Spur Replacement | Complete the digital microwave and radio conversion in Northeast Washington. | $ 39.5 | $ 31.6 | $ 11.9 | 8/30/17 | 7/3/17 |
| Central Oregon Transformer Addition | Install a second 500/230 kV transformer bank at BPA's Ponderosa substation. | $ 29.1 | $ 35.0 | $ 34.8 | 10/31/13 | 3/15/13 |
| Central Ferry to Lower Monumental (Little Goose Area Reinforcement) | Construct a 38 mile 500 kV transmission line between Central Ferry and Lower Monumental substations. | $ 90.0 | $ 90.0 | $ 19.7 | 12/31/13 | 2/27/15 |
| Celilo Mercury Containment and Abatement | Contain and abate the mercury contamination at the Celilo Converter Station. | $ 10.8 | $ 11.7 | $ 8.5 | 5/31/13 | 9/30/13 |
| Central Ferry Generation Interconnection | Generation interconnection request. Construction of a new 500/230 kV substation and related fiber communications work. | $ 98.4 | $ 77.0 | $ 77.0 | 5/30/12 | 7/15/13 |
| Rights-of-Way Access Roads and Land Rights Acquisition Program FY13 to FY15 | Implement a stable, sustained ROW program. The three year plan includes cumulative cost and work plan completion targets. | At least $9.4 for FY13 | $ 17.8 | $ 9.0 | Achieve 100% of workplan | 90% of workplan |
| Summit Ridge Wind Generation Interconnection | Generation interconnection request. Install a new 230 kV ring bus to loop in the Big Eddy - Maupin 230 kV line. | $ 11.3 | $ 11.3 | $ - | 9/1/13 | 9/1/13 |
| P25 Two-Way Mobile Radio Upgrade | Replace and upgrade the mobile two-way radio system to P25 technology. | $ 64.5 | $ 61.3 | $ 1.1 | 9/30/17 | 9/30/17 |
| Switchgear Replacement for Fault Duty FY12 | Replace under-rated switchgear identified in annual screening process. | $ 14.9 | $ 14.7 | $ 7.9 | 12/31/14 | 9/26/14 |
| Pacific DC Intertie Upgrade - Station Work | Modernize the Celilo converter terminal and upgrade capacity from 3100 MW to 3220 MW for north to south power flow with a future upgrade path to 3800 MW. | $ 275.8 | $ 269.2 | $ 26.1 | 12/20/15 | 12/20/15 |
| Pacific DC Intertie Upgrade - Line Work | | $ 40.0 | $ 28.1 | $ 2.4 | 10/31/17 | 10/31/17 |
| Puget Sound Area Northern Intertie (PSANI) Memorandum of Agreement | Install a 500/230 kV transformer bank addition at Raver Substation. | $ 56.4 | $ 56.4 | $ 0.1 | 9/30/16 | 7/14/16 |
| Horse Butte Wind Interconnection | Interconnect UAMPS wind project. | $ 10.2 | $ 8.2 | $ 7.0 | 11/30/12 | 11/11/13 |

This information has been made publicly available by BPA on 8/13/2013 and does not contain Agency-approved Financial Information.

[1] Includes capital projects authorized at the agency level since August 2007

[2] Direct capital costs exclude AFUDC and overheads

[3] Actual costs are project costs to date.

[4] Contracts have not been awarded - cost estimates are confidential

## Major Capital Projects[1] - End-of-Project Target Performance

Q3 2013

| Project | Description | Direct Capital $M[2] Target | Direct Capital $M[2] Forecast | Direct Capital $M[2] Actual[3] | In-Service Date Target | In-Service Date Forecast |
|---|---|---|---|---|---|---|
| **Transmission - continued** | | | | | | |
| MT to WA Transmission System Upgrade - NEPA | NEPA and preliminary engineering and design for the former CUP West project. | $ 7.2 | $ 7.0 | $ 0.5 | 3/31/15 | 3/30/15 |
| Lower Valley NEPA (Hooper Springs) | NEPA and preliminary engineering and design work for the Lower Valley Area Reinforcement project. | $ 19.1 | $ 18.2 | $ 15.8 | 11/1/13 | 2/1/14 |
| AC Substations Sustain Program FY13-15 | Implement a stable AC substation equipment replacement program. The 3 year plan includes cumulative cost and scope/schedule targets. | $4.95 for FY13 | $ 9.0 | $ 3.2 | Deliver 100% of workplan | Deliver 100% of workplan |
| PSC/Telecom Sustain Program FY13-15 | Implement a stable PSC/Telecom equipment replacement program. The 3 year plan includes cumulative cost and scope/schedule targets. | $7.7 for FY13 | $ 6.5 | $ 1.7 | Deliver 100% of workplan | Deliver 86% of workplan |
| #JC Microwave Upgrade | Complete the digital conversion for the upper part of the #JC communications ring. | $ 13.5 | $ 13.5 | $ 0.8 | 9/1/18 | 9/1/18 |
| Operational Multi-Gigabit Ethernet Transport (OMET) | Communications upgrade and replacement project to ensure adequate capacity and compatibility for emerging monitoring and control equipment. | $ 43.5 | $ 43.5 | $ 0.8 | 3/30/17 | 3/30/17 |
| McNary Substation - Additional 500 kV Transformer | Install an additional transformer bank to handle increased loading. | $ 20.2 | $ 20.2 | $ - | 5/30/17 | 5/30/17 |
| **Federal Hydro** | | | | | | |
| Grand Coulee and Hungry Horse SCADA Replacement | Replace SCADA systems at Grand Coulee and Hungry Horse. | $ 46.8 | $ 46.8 | $ 34.9 | 9/30/15 | 8/31/16 |
| Grand Coulee Exciter Replacement | Replace 6 original excitation units in Powerhouse 3. | $ 23.0 | $ 20.3 | $ 20.3 | 11/30/13 | 5/18/13 |
| Grand Coulee Left Powerhouse Transformer Replacement | Replace transformer banks K1, K5, K7, K8 and purchase one spare transformer bank. | $ 15.7 | $ 15.7 | $ 11.0 | 10/31/14 | 12/31/14 |
| Grand Coulee 500kV Switchyard Relay Replacement | Replace the protective relays and microwave transfer trip between the third power plant and 500kV switchyard and between the 230kV and | $ 7.6 | $ 7.6 | $ 4.2 | 9/30/14 | 9/30/14 |
| Grand Coulee Pre Overhaul - Winding Replacement G19, G20 | Replace the stator core and windings on units G19 and G20. | N/A[4] | N/A[4] | $ 0.7 | 5/31/13 | 4/29/18 |
| Grand Coulee Pre Overhaul - High Voltage Cable Replace. | Install overhead, high-voltage cables to transfer power from the third power plant. | $ 46.7 | $ 36.7 | $ 34.9 | 12/31/12 | 12/31/12 |
| Grand Coulee - Keys Pump Generating Station - Reliability | Replacements and upgrades to maintain the current capability of the station. | $ 61.4 | $ 61.4 | $ - | 9/30/21 | 9/30/21 |
| Chief Joseph Turbine Runner Replacements Units 1 - 16 | Replace the turbine runners and rehabilitate the turbines on units 1 - 16. | $ 166.0 | $ 166.0 | $ 85.4 | 9/30/17 | 9/30/17 |
| Chief Joseph Exciter Replacement | Replace excitation units (17 to 27) that have reached the end of their useful lives. | $ 9.2 | $ 9.2 | $ 0.6 | 12/30/15 | 12/30/15 |

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## Major Capital Projects[1] - End-of-Project Target Performance

Q3 2013

| Project | Description | Direct Capital $M[2] Target | Direct Capital $M[2] Forecast | Direct Capital $M[2] Actual[3] | In-Service Date Target | In-Service Date Forecast |
|---|---|---|---|---|---|---|
| **Federal Hydro - continued** | | | | | | |
| Chief Joseph Governor Replacement | Upgrade the 27 governors with digital controls and replace associated equipment. | $ 10.7 | $ 10.7 | $ 0.4 | 8/19/17 | 8/19/17 |
| The Dalles Powerhouse Governor Upgrade | Upgrade of the governors with digital controls and replacement of associated components. | $ 21.8 | $ 21.8 | $ 10.5 | 9/30/14 | 9/30/14 |
| McNary Main Unit 1-4, 7-12 Stator Winding Replacement | Replace stator windings that are over 50 years old. | $ 80.0 | $ 80.0 | $ 53.1 | 12/31/14 | 4/1/15 |
| McNary Governor Replacement | Upgrade the 14 governors in the McNary powerhouse with digital controls. | $ 9.3 | $ 9.3 | $ 0.1 | 1/29/18 | 1/29/18 |
| Bonneville PH2 Station Services Replacement | Upgrade Powerhouse 2 station service with new transformers and switchgear. | $ 12.1 | $ 10.8 | $ 10.8 | 5/31/13 | 3/28/13 |
| John Day Governor Upgrade | Upgrade of the governors with digital controls and replacement of associated components. | N/A[4] | N/A[4] | $ 1.5 | 10/23/14 | 10/26/16 |
| Ice Harbor Turbine Runner Replacement | Replace the poor condition turbine runners in units 1, 2 & 3 and incorporate a more fish-friendly design. | $ 97.0 | $ 97.0 | $ 9.5 | 10/1/18 | 10/1/18 |
| Lower Snake Exciter Replacement | Replace 6 exciters at Little Goose, 3 at Lower Monumental and 3 at Lower Granite. | $ 12.9 | $ 12.9 | $ 9.4 | 2/27/13 | 7/31/13 |
| Hungry Horse Station Service Replacement | Replace station service switchgear distribution board/feeder cables and upgrade relay protection/metering. | $ 8.1 | $ 8.1 | $ 0.4 | 1/31/15 | 1/31/15 |
| Hills Creek Powerhouse Turbine and Unit Rehabilitation | Replace turbine runners and generator windings on units 1 and 2 at Hills Creek. | $ 24.1 | $ 24.1 | $ 3.5 | 8/12/14 | 3/31/15 |
| Black Canyon Third Generating Unit | Add a third generating unit at Black Canyon. The capacity of the unit will be between 10 and 15 MW. | N/A[4] | N/A[4] | $ 4.2 | 12/31/14 | 12/31/16 |
| Palisades Turbine Rehabilitation and Runner Replacement | Replace the turbine runners and rehabilitate the turbines on the four Palisades units. | $ 28.8 | $ 28.8 | $ 12.6 | 5/31/16 | 5/31/16 |
| Dexter Spillway Gate Rehabilitation | Rebuild the seven tainter spillway gates at Dexter. | $ 18.0 | $ 18.0 | $ 15.9 | 9/15/13 | 9/15/13 |
| Big Cliff Spillway Gate Rehabilitation | Rebuild the three tainter spillway gates at Big Cliff. | $ 11.0 | $ 11.0 | $ 8.1 | 12/30/13 | 12/30/13 |
| **IT** | | | | | | |
| Desktop Modernization Project | Deploy Windows 7, Office 2010 and end-user devices. | $ 9.1 | $ 8.6 | $ 6.6 | 3/31/14 | 3/31/14 |
| IT Virtualization and Consolidation Project (IVC) | Replace and modernize server infrastructure for non-critical business systems. | $ 21.8 | $ 21.3 | $ 11.4 | 9/30/14 | 10/31/14 |
| **Facilities** | | | | | | |
| Eastside Alternate Operating Facility | Spokane-area facility for redundant transmission and power scheduling functions and alarm monitoring. | $ 17.5 | $ 20.2 | $ 2.3 | 3/31/14 | 7/31/14 |
| Tri Cities Maintenance Headquarters and Franklin Yard | Construct Tri-Cities maintenance HQ, heat line for spare transformers and a spare parts yard at Franklin. | $ 14.2 | $ 14.2 | $ 0.8 | 12/31/13 | 12/31/14 |

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# Capital Investment Prioritization

Mike DeWolf
Asset Manager

# Background

- BPA and its FCRPS partners face **growing investment requirements** to replace and modernize aging infrastructure, add capacity to meet loads and integrate new generating resources, and fulfill regional commitments for energy efficiency and fish and wildlife restoration
- At the same time, BPA's **access to low cost sources of capital is constrained**
- BPA does not have a robust, agency-wide process in place to make trade-offs and ensure that limited capital is deployed optimally. A systematic, value-based method for prioritizing capital investments across business units is **a leading practice** among top performing utilities
- During the 2012 Capital Investment Review, BPA proposed to develop a **method for prioritizing investments**
- Since then, BPA has designed and is now implementing the BPA-wide prioritization process
- The purpose today: update you on our progress

# Goals

**Create an agency-level process that:**

- Furthers the agency's strategic priorities/objectives
- Provides a "level playing field" for projects with different risk/cost/benefit characteristics from various asset categories
- Optimizes the agency's investment portfolio within capital, labor, rate, and other constraints
- Ensures decision-making is risk-informed and supported by thorough analysis
- Provides transparency both internally and externally
- Enables efficient, timely decision making
- Enables BPA to track the performance and measure the realized value from investments

The methodology and process will be directed at maximizing the long-term operational and economic value of assets.

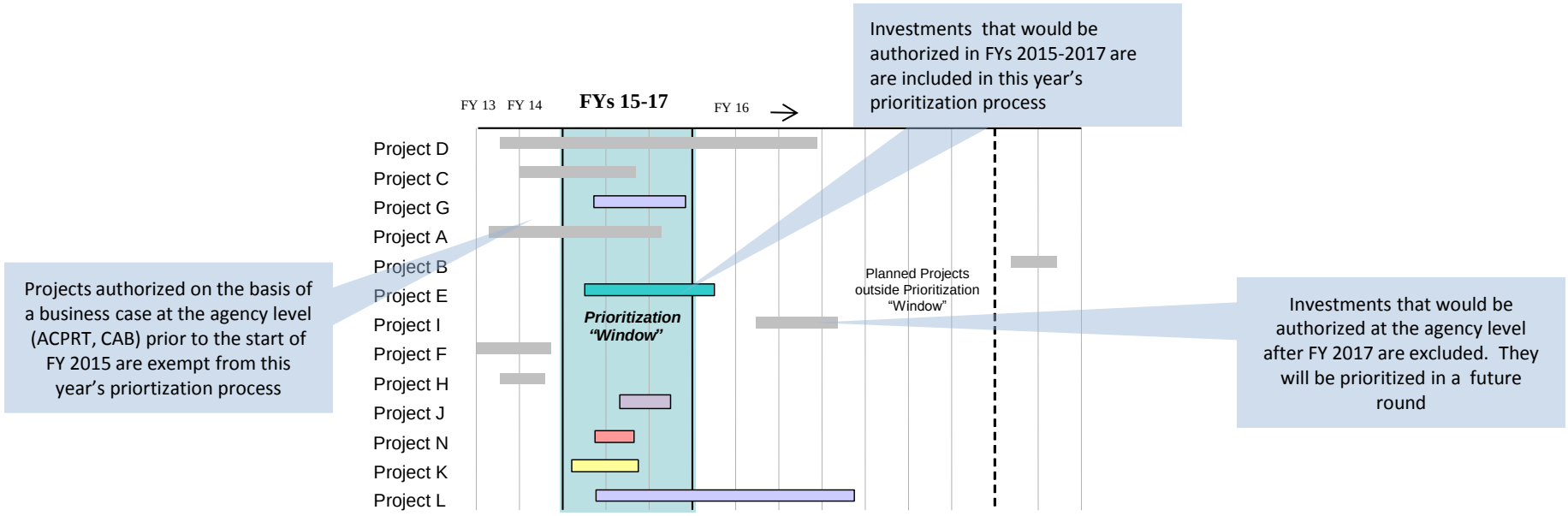
BPA's Capital Allocation Board (CAB) will serve as the executive steering team for this process.

(These goals were adopted in 2012 and remain unchanged )

# Which investments are covered by this year's process?

**Investments are included if they:**

- Fall within the Transmission, Federal Hydro, IT, or Facilities asset categories (Energy Efficiency and Fish and Wildlife are exempt from this year's process)
- Meet the definition of Expansion or Non-Core Sustain investment ("core sustain" investments are exempted – see next slide)
- Entail upfront investment costs of $3 million or more (upfront capital and upfront expense combined; smaller projects or groups of projects may be submitted at the discretion of the asset category)
- Not authorized by October 1, 2014 ("authorized" means proposed and approved on the basis of a business case at the agency level (ACPRT, CAB))




**Note:** "Investment" includes upfront capital expenditures and upfront expense expenditures to plan, design, and build or acquire equipment, facilities, or software applications

# Investments covered by the new prioritization process include all expansion–type investments

***How "core sustain" and "expansion" are defined***

**Prioritized through asset strategies**

## "Core" Sustain Investment

Investment the primary purpose of which is to replace existing assets in order to maintain system performance and capability

**Prioritized through new process**

## Expansion and "Non-Core" Sustain Investment

Investment that "grows" the asset base, i.e., adds capacity or new capabilities, or that increases operational output or productivity. Also includes sustain investment that is "non-core"

***Compliance – 3 years Investment must occur in next 3-years in order to comply with* contract, order, or directive**

***Policy Commitment – 3 Years Investment must occur next 3 years to fulfill commitments made by the agency***

***Discretionary -3 years* Investment that may be valuable, but can be deferred**

**Funded first**

**Funded with remaining capital that the agency has budgeted**

**Core sustain** investments are exempt from the process. The process covers expansion and "non –core" sustain investments only

"**Core sustain**" investments are prioritized through condition-based risk assessments, in which the highest priority is assigned to the most critical equipment and facilities at greatest risk of failure, obsolescence, safety issue, or other asset risk factors. Included are projects necessary to make core sustain investment viable, such as access roads that enable line replacements. Prioritization of core sustain investments occur within the asset strategies that are developed by each asset category and approved by the CAB.

- For Transmission, **core sustain** investments include replacements when the replacement's primary purpose is to manage failure, obsolescence, safety, environmental, and related risks. When the primary purpose of the investment is to upgrade or add capacity , flexibility, or other new capabilities, then the investments is classified as **expansion/non-core sustain**
- For Federal Hydro, **core sustain** investments include replacements when the replacement's primary purpose is to manage failure, obsolescence, environmental, or safety risks. When the primary purpose of the investment is to improve generating efficiency or add generating capability, then the investment is classified as **expansion/non-core sustain**
- For IT, **core sustain** investments include replacements of end-of-life cycle, failing, or technologically obsolete hardware. All other investment, including all software applications and application upgrades, are classified as **expansion/non-core sustain**
- For Facilities, **core sustain** investments include replacements when the primary purpose is to manage failure risks and functional obsolescence or to mitigate environmental, health and safety risks. When the primary purpose of an investment is to upgrade or add capacity, flexibility, or other new capabilities, then the investment is classified as **expansion/non-core sustain**.

- -- -- -- --

Energy Efficiency capital spending that implements the power plan and Fish and Wildlife capital investments that implement the BIOp and current fish accords are generally prioritized by entities outside the FCRPS. For purposes of the 2013 process at least, these investments will be treated as if they were "core sustain" investments.

# How are the classifications defined?

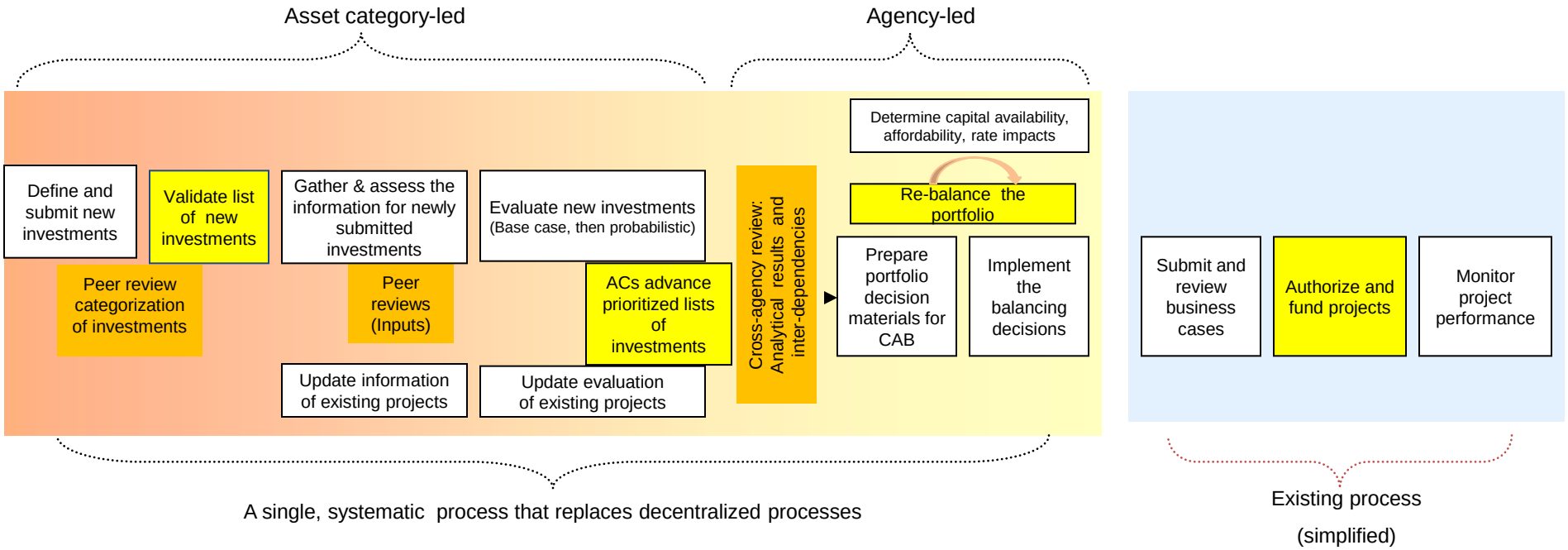
## Expansion and "Non-Core" Sustain Investment

Investment that "grows" the asset base, i.e., adds capacity or new capabilities, or that increases operational output or productivity.

| | **Compliance**<br>**Investment must be authorized during the 3-year prioritization window in order to comply with contracts, orders, directives** | **Policy Commitment**<br>**Investment must be authorized during 3-year window to fulfill commitments made by the agency** | **Discretionary**<br>**May be preferable that investment start during the 3-year window, but it can be deferred** |
|---|---|---|---|
| **Driver of investment** | Investments in the Compliance classification are essential to the agency's ability to comply with a signed contract, regulatory directive, or an executive or judicial branch order or directive. The contract, order or directive must compel BPA to make an investment -- failure to make the investment timely would result in a violation. To be eligible, the investment must be authorized and work must begin by no later than the end of the 3-year prioritization window. | Investments in this category are essential to meeting commitments made by the agency. The commitments require that BPA invest to meet tariff provisions, NOS policy commitments, and load service obligations. The commitments require that investments be authorized and that investment begins by no later than the end of the 3-year window. A failure to make the investment during the window would result in serious reputational risks and legal risks | Expansion and "non-core" sustain investments that may be highly valuable, but that may be deferred beyond the 3-year prioritization window<br>Includes economic opportunity investments to reduce operating costs, enhance revenue, improve internal efficiency<br>Also includes "Compliance" and "Policy Commitment" investments if the investment can be deferred to year 4 or later. (Investments can move from the discretionary category to the categories at left over time) |
| **Discretion on whether and how to invest?** | Little or no discretion on whether an investment needs to be made. The purpose and nature of the investment are largely mandated | Little or no discretion on whether an investment needs to be made, although changes in customer needs, market conditions, and other external factors can cause shifts in the composition and timing of the investment. Discretion is normally available on investment alternatives | Discretion on whether to invest and on investment alternatives |
| **Discretion on timing of investment?** | Little or no discretion on timing of the investment. Often the investment is mandated by a certain date. Investment must be authorized and work must begin by no later than the end of the 3-year prioritization window in order to comply | Some discretion on timing of the investment. Timeline for completion is driven by agency commitments – must begin during the 3-year window to avoid reputational and legal risks | Yes |
| **Examples** | LGIA agreement, if the agreement requires investment during the 3-year prioritization window<br>Investment in new security equipment to meet NERC CIP, if investment is required during the 3 years | Investment to meet load service obligations, if necessary during the 3-year window<br>Network open season-driven investment, if necessary during the 3 years<br>Information systems to meet regional dialogue commitments<br>SLICE application | New or expanded maintenance headquarters or new office building<br>Addition of a hydro generation turbine, turbine runner replacements when efficiency is a primary driver<br>New IT applications driven by business process efficiencies such as TAS, EE Central<br>Acceleration of a transmission sustain investment program |
| **Treatment in prioritization process** | For these investments, the strategic fit test is deemed to be met. While capital costs are estimated and vetted, the economic value test is not required, but may be useful in choosing the best alternative. Investments in this category are not priority ranked based on economic value. Like Core Sustain, these investments are funded ahead of Policy Commitment and Discretionary investments. | Strategic fit test is deemed to be met. Economic value test applies. These investments are priority ranked along with discretionary investments based on economic value. They are flagged, however, and the CAB will likely fund these investments ahead of discretionary investments | Strategic fit and economic value tests apply. These investments are priority ranked along with Policy Commitment investments based on economic value. They are funded after investments in the Core Sustain, Compliance, and Policy Commitment classifications |

For purposes of the 2013 process, "Investment must be authorized during the 3-year window" means the project must be proposed and approved on the basis of a business case at the agency level (ACPRT, CAB) during the FY 2015-2017 period. Projects authorized before October 1, 2014 are exempt from the 2013 process.

# Sequence of Steps




Yellow boxes: steps requiring executive action  Orange boxes: steps involving peer reviews

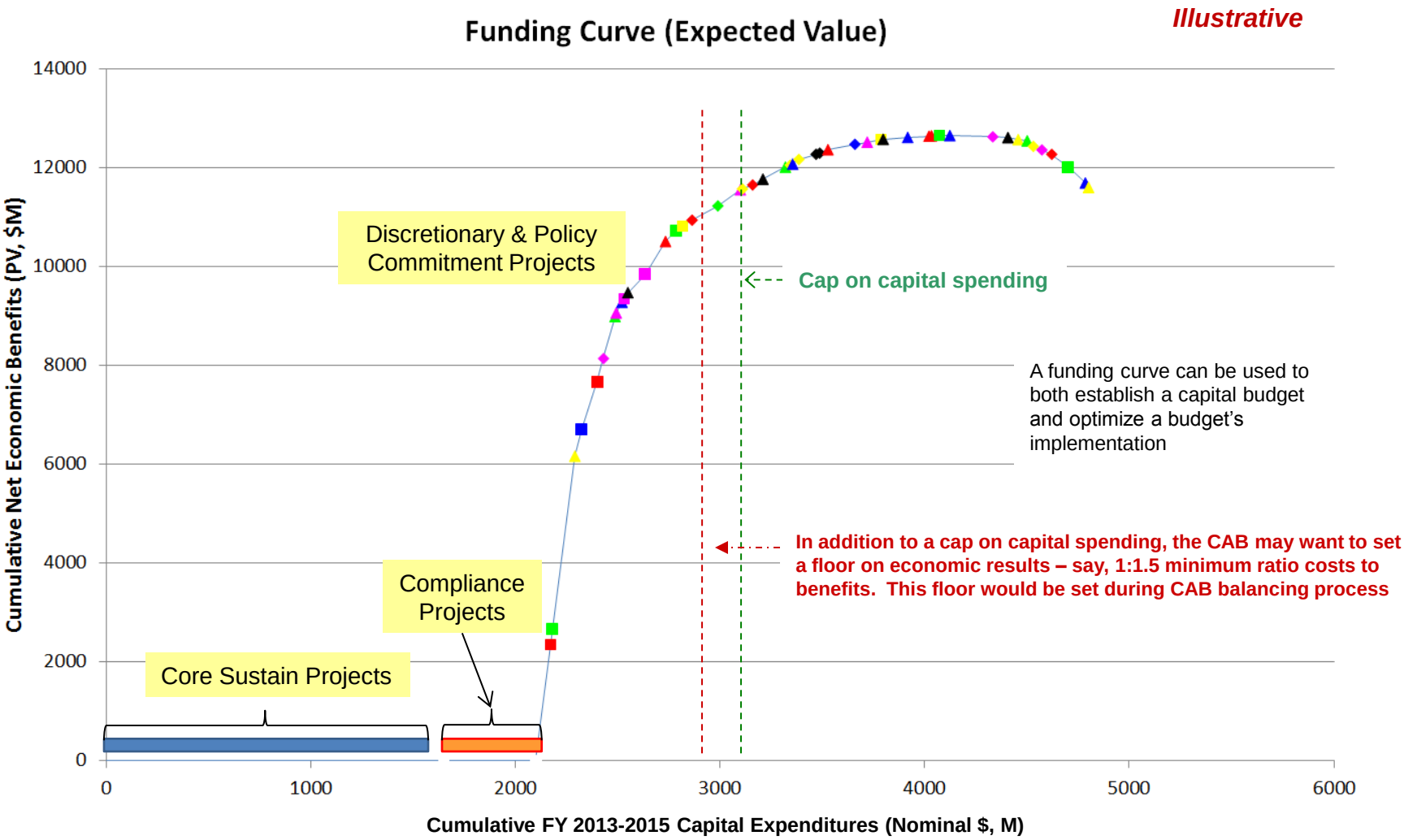
# Investments are being evaluated using three "tests"

1. **Strategic fit**
   - An advisory assessment of each investment's usefulness in delivering on the agency's strategic priorities
   - This test is applied to Discretionary investments only; the test is assumed to be met for Compliance and Policy Commitment projects

2. **Value contribution**
   - Investment benefits and costs are evaluated using two principal metrics:
     1. "Net Economic Benefits Ratio" (applies to Policy Commitment and to Discretionary investments, but not to Compliance projects)
     2. "NPV BPA Cash Flows" (applies to all three types of investments)
   - Policy Commitment and Discretionary investments will be ranked initially on the basis of the first metric, Net Economic Benefits Ratio

3. **Feasibility**
   - Evaluates the affordability, revenue requirement impact, and execution risks of investment portfolios

# Capital is reserved for core sustain and compliance projects
# Remaining projects are prioritized and compete for capital based on their value



# Deliverables for 2014 CIR

# We're on track

The purpose, scope, goals, roles, and overall mechanics of the process have been designed and communicated, and implementation is well underway

Analytical methodology has been designed and is now being implemented

- Metrics, modeling approach defined
- Input templates and models developed, tested, and deployed
- Assessment process has been wrapped up
  (cost and benefit information has been collected, validated and inputted)
- Evaluation process (modeling) is underway, with results being validated and calibrated
- On a parallel track, analytics to determine "affordability cap" for capital spending are nearing completion

| | |
|---|---|
| Expansion-type investments that were nominated | |
| Assessed and evaluated in this prioritization cycle | 26 |
| Deemed too early or too late to assess costs and benefits | 14 |
| Cancelled, combined with other project(s), deferred beyond FY 2017 | 11 |
| Total nominations received | 51 |
| Expansion-type investments already in flight | 19 |
| Grandfathered; counts investments $3M and above only | |

Next up: Assemble portfolio materials and present for CAB review (Late Nov – early Jan)

Then: Public comment process - Capital Investment Review (mid Feb – Mar)

And then: Updated portfolio that takes stakeholder comments into account (April – May)

# What we plan to deliver for the 2014 CIR

For the 2014 CIR, we plan to provide:

- A summary of the process and analytical methodology that we used
- A synopsis of the investments considered by the CAB through this process
- The estimated range of capital costs and net economic benefits for the investments, with any unquantified cost and benefit drivers identified
- The funding curve and other, select decision support materials considered by the CAB
- Logic behind the cap on total capital spend that is used
- A summary of strategic context and the trade-offs considered by the CAB when selecting the portfolio
- Final criteria for delineating core sustain investment from expansion and non-core sustain investment
- Final criteria for delineating compliance from policy commitment from discretionary investment

Separately, we will provide updated 10-year asset strategies for core-sustain

(Essentially unchanged from previous QBR presentations)

*Deliverables for 2014 CIR*

# Grand Coulee Dam Third Powerplant Overhaul

Mike Alder
Program Manager (Operations & Maintenance)

# Reasons for Overhaul

- Importance of a reliable Third Powerplant (TPP) to the region
- TPP Conditions are Worsening
  - Shear Pin failures (operating ring wear)
  - Shaft Seal failures
  - Increased Water Leakage
  - Increasing unscheduled outages
- Extension of Overall Plant Life
  - Electrical power, controls, annunciations, protective relays
  - Unit auxiliaries (piping, valves, $CO_2$, stator cooling water, gates)

# TPP Overhaul Program

Components:

- G22-24 Mechanical Overhaul
- G19-21 Mechanical Overhaul; Possible Uprate
- Pre-overhaul projects (9)
- B-List Team projects (112)

# TPP Pre-Overhaul Projects

- 500kV Overhead Lines
- Material Storage Building
- Crane Controls
- Fixed Wheel Gate Chamber Modifications
- Elevator Modernization
- Excitation Replacement
- Governor Upgrades
- K19A, K20A Transformer Replacement
- Mechanical Shaft Seals (Procurement Only)

*These projects are all substantially complete*

# TPP B-List Team / Projects

- 112 smaller projects
- Overhaul Crew (1 Sup, 4 Electricians, 4 Mechanics)
- All 30+ year old items that need to be overhauled, which were not included in the overhaul contract (air valves, water valves, governor motors, special tools, etc.)
- Assists pre-overhaul contractors and overhaul contractor

*Most B-List Projects are complete; Others are in progress and on schedule*

# TPP Overhaul Program

## Timeline

| Fiscal Year | G22-24 | G19-21 | Fiscal Year | G22-24 | G19-21 |
|---|---|---|---|---|---|
| 2011 | Procurement | Planning | 2017 | Overhaul Complete | Contractor Preparing for Overhaul |
| 2012 | Contractor Prepared for Overhaul | Planning | 2018 | | Overhaul Begins |
| 2013 | Overhaul Began 3/12/13 | Planning | 2019 | | Overhaul Ongoing |
| 2014 | Overhaul Ongoing | Design | 2020 | | Overhaul Ongoing |
| 2015 | Overhaul Ongoing | Procurement | 2021 | | Overhaul Ongoing |
| 2016 | Overhaul Ongoing | Contractor Preparing for Overhaul | 2022 | | Overhaul Complete |

# G-22, G-23 & G-24 Overhaul Contract

- Awarded to Andritz Hydro for $102 million
- Schedule: March 2013 – June 2017
- 17 months/unit
- Components to be overhauled:
  - Wicket Gates, Bushings
  - Head-cover, Operating Ring
  - Servos
  - Lubrication Systems
  - Cooling Water Systems
  - Brake and Jack Systems
  - Wear Rings
  - Bearings
  - Shaft Seals (new mechanical seals)

# G-22, G-23 & G-24 Overhaul: Major Risks and Responses

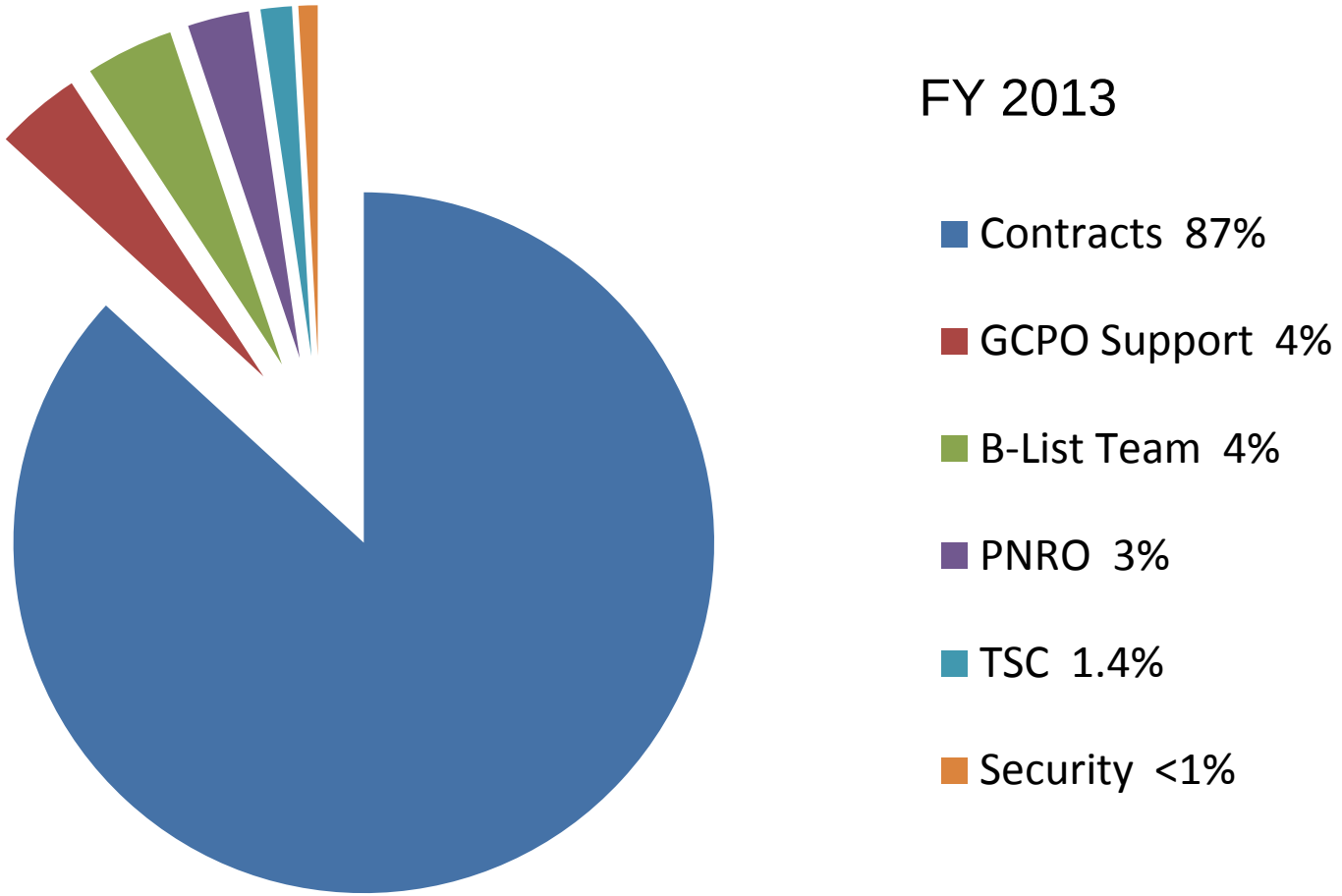
- Cracked Wicket Gates
  - Response: Procured nine new wicket gates
- Cracked Head Cover
  - Response: FEA on Headcover showed probability low
- Unknown broken parts
  - Response: Specification includes replacement parts for all long lead items
- G19-21 Forced Outage
  - Response: Plan developed to accommodate additional lay down space during the G22-24 overhaul
- Cracked Turbine
  - Response: Specification includes repair

# Third Powerplant Overhaul: Budget

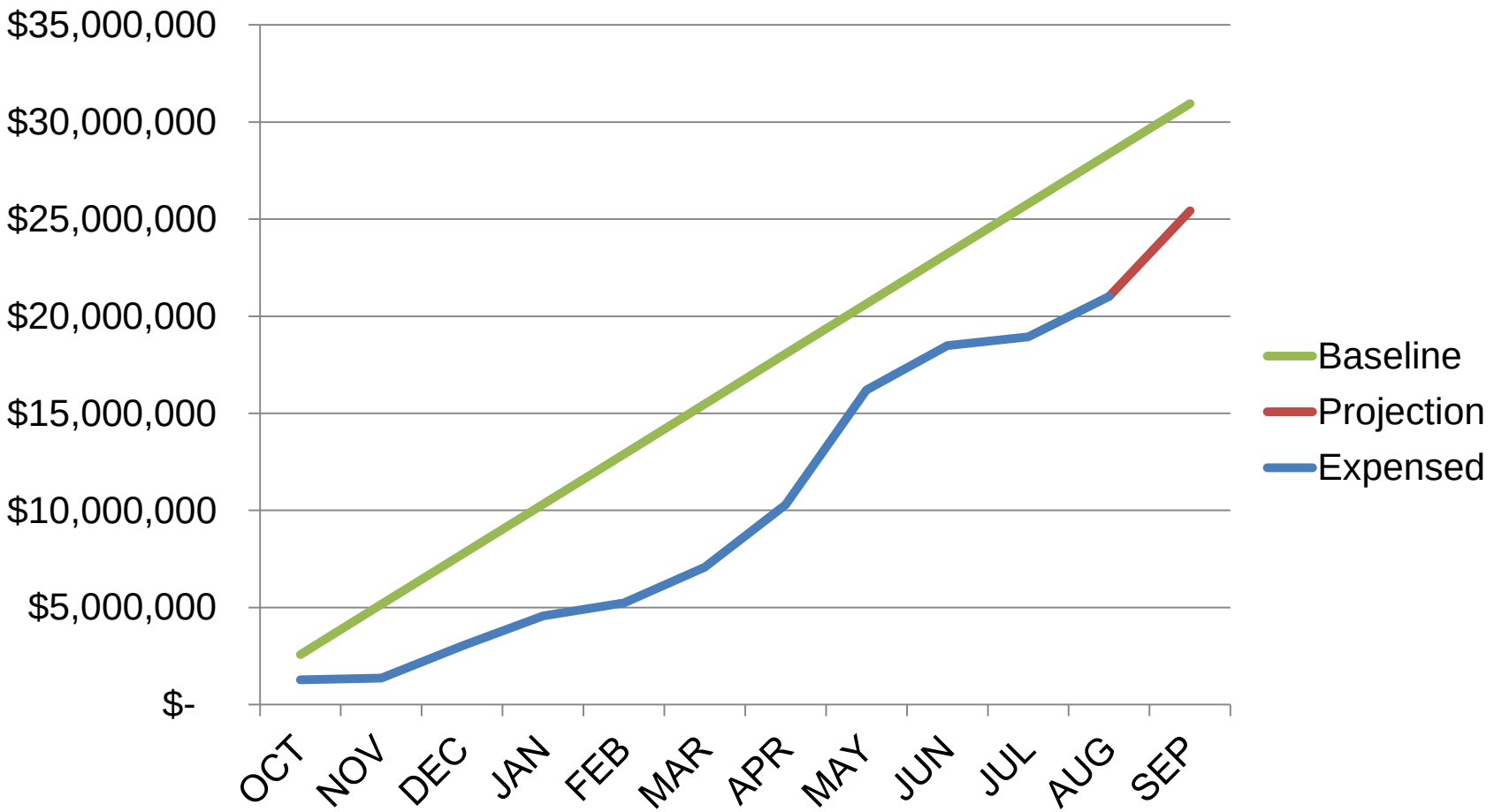
| Fiscal Year | Cost |
|---|---|
| 2011 | $6.1M |
| 2012 | $12.2M |
| 2013 | $25.4M |
| 2014 | $29.8M |
| 2015 | $24.1M |
| 2016 | $22M |

| Fiscal Year | Cost |
|---|---|
| 2017 | $30.5M |
| 2018 | $30M |
| 2019 | $26.7M |
| 2020 | $22.3M |
| 2021 | $27.0M |
| 2022 | $17.7M |

# Third Powerplant Overhaul: Budget



# G-22, G-23 & G-24 Overhaul: FY 2013 Budget



# G-22, G-23 & G-24 Overhaul: Where are we now?

- Overhaul of G24 commenced March 12, 2013
- Contractor blasting/painting shop erected
- All pre-shutdown readings documented
- Alignment/clearance readings taken
- Generator wiring identified/tagged
- Turbine guide bearings removed
- Scaffolding built in spiral case
- Upper bracket removed
- Rotor removed

# G-22, G-23 & G-24 Overhaul: Where are we now?

- Upper, intermediate, and lower turbine shafts removed
- Work stoppage due to contractor's non-compliance May 28, 2013 – July 22, 2013
- Servos removed
- Runner crown removed
- Inner and outer head covers removed
- Containment built for blasting and painting of lower bearing bracket

# G-22, G-23 & G-24 Overhaul: Where are we now?

- Wicket gate arms removed
- Wicket gates removed
- Lower wear ring removed
- Preparation for penstock recoating in progress
- Runner scheduled to be removed September 16, 2013

# G-22, G-23 & G-24 Overhaul: Where are we now?

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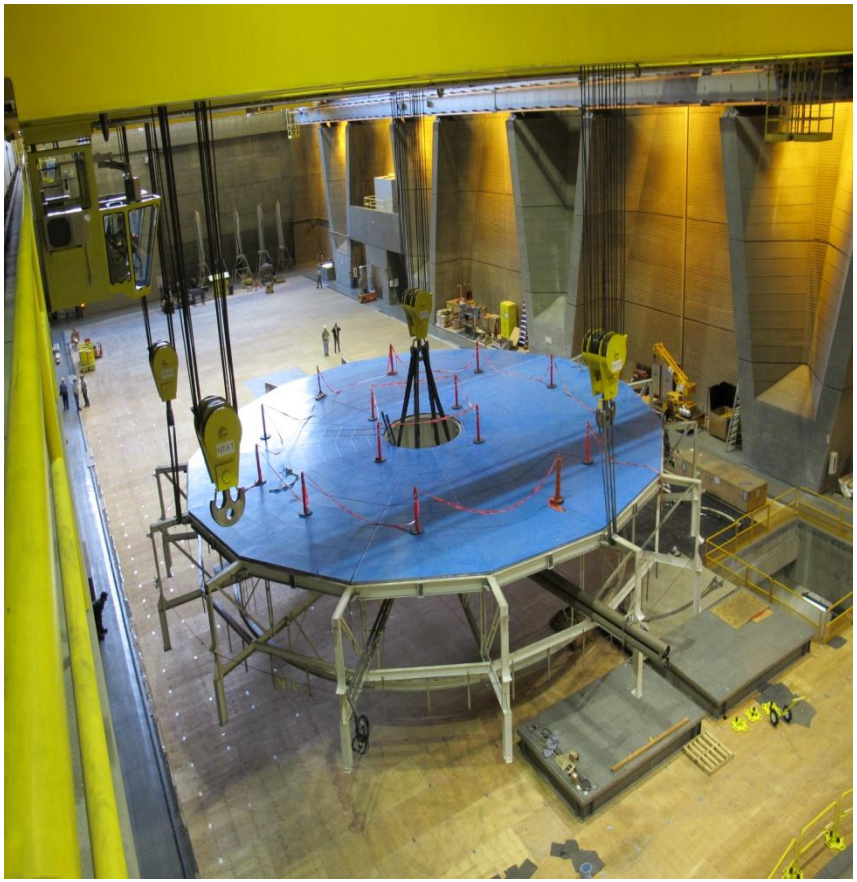
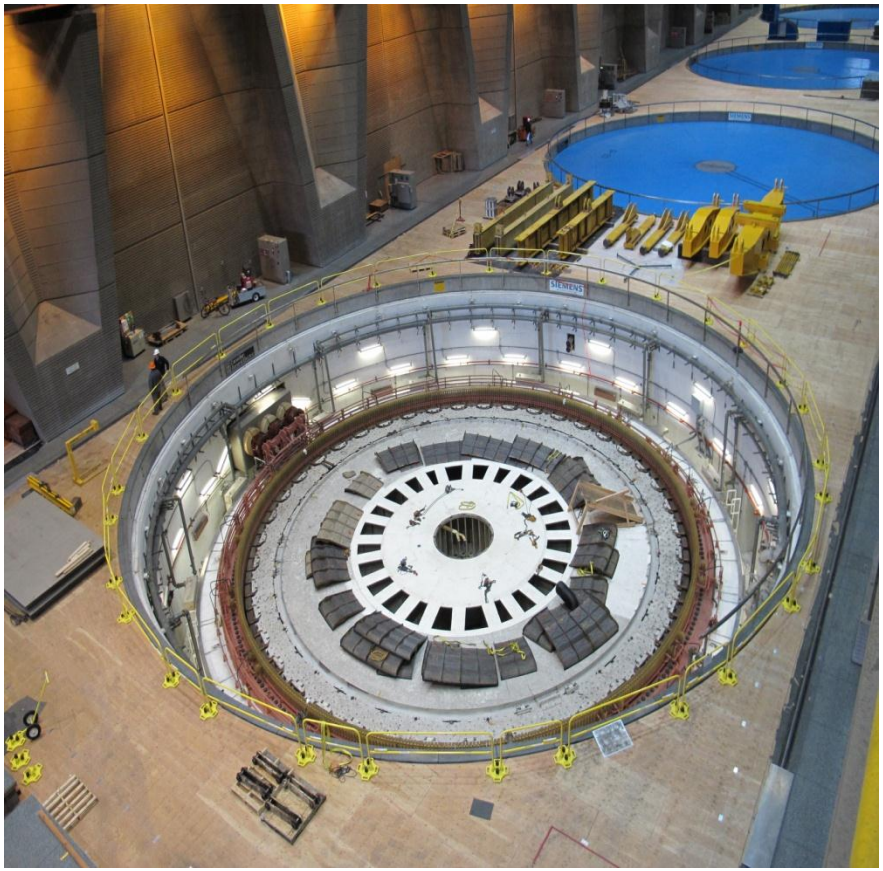
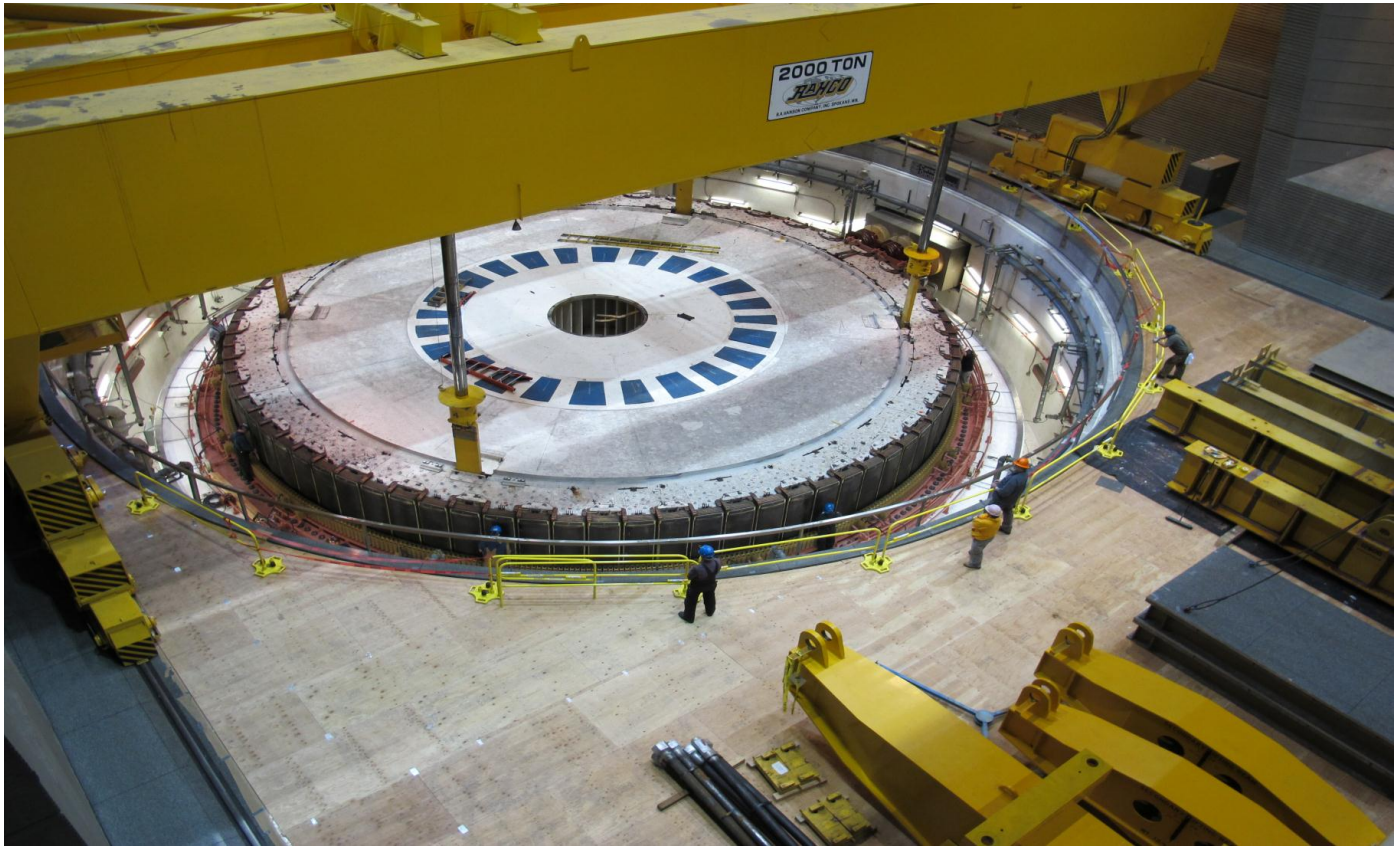




# G-22, G-23 & G-24 Overhaul: Where are we now?



# G-22, G-23 & G-24 Overhaul: Where are we now?

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# G-22, G-23 & G-24 Overhaul: Where are we now?

# G-22, G-23 & G-24 Overhaul: Where are we now?

- Unit will be completely disassembled by mid-September
- Inspections and Non-Destructive Testing of all major components
- Begin reassembly in February 2014
- Unit return to service scheduled for September 2014

# G-22, G-23 & G-24 Overhaul: Cost and Schedule Impacts?

- Unilateral contract mod issued to contractor to remove asbestos from air cooling and water piping gasketing materials
  - Estimated cost of $60,000, no schedule impact
  - Contractor has not submitted the actual cost and schedule impact

- Difficulty removing wicket gate arms
  - Contractor recently submitted a Request for Equitable Adjustment (REA) for ~$50,000
  - This is currently being evaluated

# G-22, G-23 & G-24 Overhaul: Cost and Schedule Impacts?

- Work Stoppage due to contractor's non-compliance
  - Reclamation does not see that a contract cost or schedule increase is warranted
  - Cost and schedule impacts unknown; contractor has not submitted an Request for Equitable Adjustment (REA)
  - Contractor may submit an REA due to the following:
    - During two month work stoppage, contractor laid off employees and partially remobilized
    - Contractor inferred that Reclamation had increased our safety requirements and subsequently increased their resources
  - Contractor was ahead of schedule six weeks prior to eight week work stoppage; Contractor's initial projected expenditures during this time averaged $3 million/month
  - Contractor's current projected cash flow report reflects no added cost or time to the overall project schedule; costs appear more evenly distributed throughout the life of the project
  - Contractor's next cash flow report and schedule are due at the end of September; they are aware that this information is needed sooner

# G-22, G-23 & G-24 Overhaul: Cost and Schedule Impacts?

- Pending Contract Modifications
  - Shaft Seal Modifications
    - ~$900,000 for all three units
    - Schedule impact being evaluated
  - Servo Stop Nut Modifications
    - ~$800,000 for all three units
    - Schedule impact being evaluated

Incorporation of these two mods could impact the overall project schedule by approximately one month; further analysis is needed

# G-19, G-20 & G-21 Uprate/Overhaul

- 2008 Uprate Study showed 770MW was achievable
- 2011 G19-21 Runner Replacement Study showed Slight positive cost-benefit for replacement
- 2012/2013 A/E (MWH) Task Order
  - Phase I: High level study of generator
  - Phase II: Holistic study of entire unit

# G-19, G-20 & G-21 Uprate/Overhaul Phase II Study

- Results and associated cost estimates in early November 2013 will allow BPA and USBR to consider economics of an uprate versus an overhaul.
- Results will end the scoping phase and feed the design phase.
- Design to commence in FY2014 pending an uprate decision from BPA.

# TPP Overhaul Program- Summary

- Program focuses on maintaining scope, schedule and budget, with attention to quality and risk.
- One TPP unit will be offline for ten years, beginning in 2013.
- Pre-overhaul projects reduce the risk of schedule slippage and increase the probability of five TPP units being available for ten years.
- Program will ensure a reliable TPP for another 30 years of service to the Pacific Northwest.

# Access to Capital Status Update

Javier Fernandez
Manager, Cash and Treasury Management

Jon Dull,
Manager, Debt and Investment Management

# Access to Capital Update

- BPA's Strategy includes the following tools
  - Lease Purchasing of Transmission Capital:
    - Update: BPA is assuming 50% Lease Purchasing.
  - Power Prepays:
    - Update: On March 29, 2013, BPA accepted an aggregate amount of $340 million received on March 29, 2013. The imputed rate was ~4.5%.
  - Conservation Financing
    - Update: Further development of conservation 3rd-party financing is on hold until regional discussions are held regarding the post-2011 conservation check-in and BPA's overall role in the Conservation Program. In addition, more precise access to capital financial strategies currently being developed may influence the implementation of this financing tool. The earliest potential implementation of 3rd-party conservation financing would be FY 2016.
  - Reserve Financing (Transmission)
    - $15 million per year through FY 2021.
  - Revenue Financing
    - Discussions ongoing.
- Targets
  - In the Access to Capital Strategy, BPA focused on level or declining debt service for Power and targeted growing debt service for Transmission.
  - To strengthen and clarify this target, BPA would like to restate that the focus is on targeted capital related costs in the revenue requirements which includes: Non-Federal debt service, depreciation and amortization, net interest expense and minimum required net revenue.

http://www.bpa.gov/Finance/FinancialPublicProcesses/AccesstoCapital/Access%20to%20Capital%20-%20Final%20Strategy.pdf

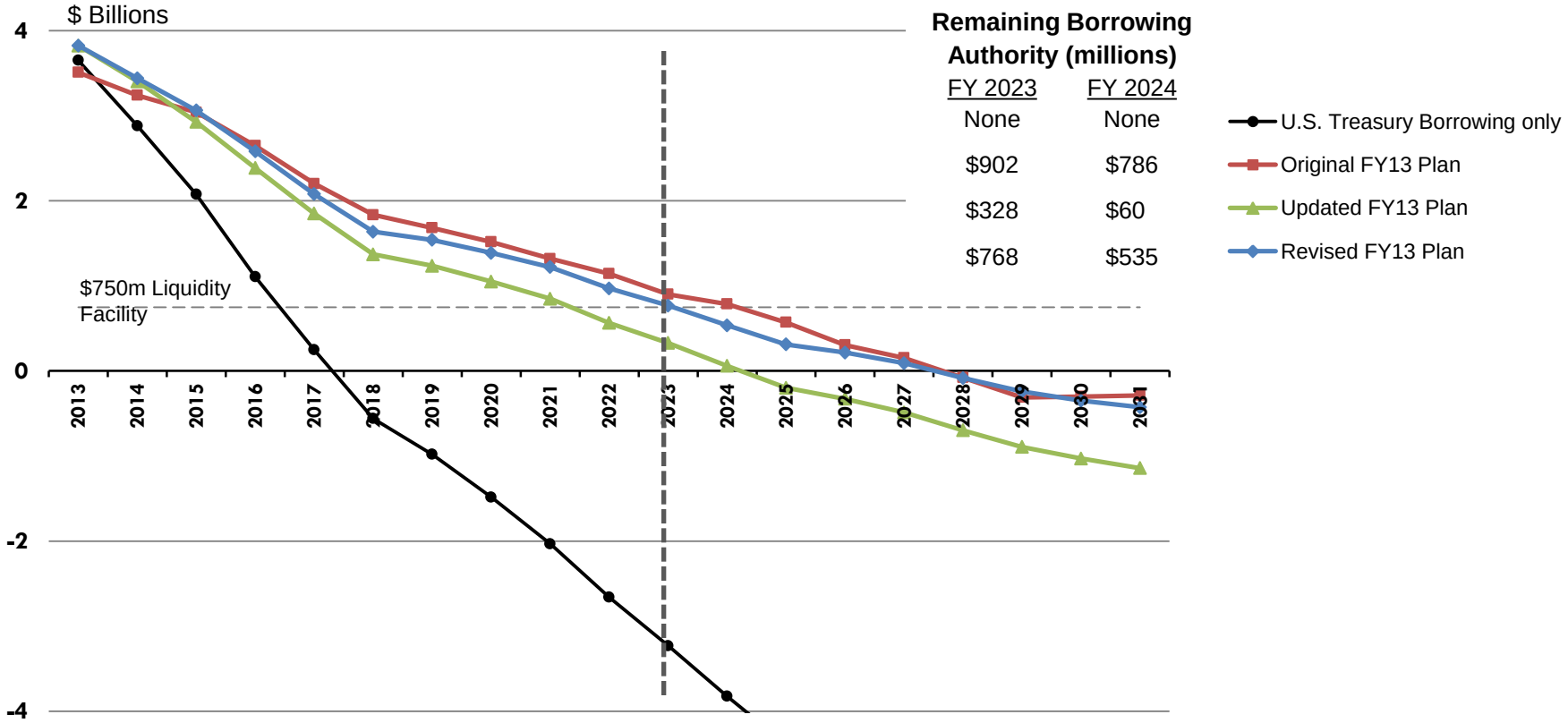
# Access to Capital FY 2013 Plan
## (Original-Updated-Revised)

Strategy includes the following tools to meet the 10-year target (amounts in parenthesis are cumulative from FY2016 to FY2025):

| | Original FY13 Plan | Updated FY13 Plan | Revised FY13 Plan |
|---|---|---|---|
| Lease Purchasing of Transmission Capital: | Ongoing 50% starting in FY13 | Ongoing 50% starting in FY13 | Ongoing 50% starting in FY13 ($2.6 billion) |
| Power Prepays: | $500m in FY14/15 | $340m in FY13 | $340m in FY13<br>$160m in FY14/15 |
| Conservation Financing | 70% starting in FY15 | 70% starting in FY16 | 70% starting in FY16 ($704 million) |
| Reserve Financing (Transmission) | $15m/year through FY21 | $15m/year through FY21 | $15m/year through FY21 ($75 million) |
| Revenue Financing | None | None | $35m/year starting FY16 ($350 million) |

# Access to Capital Update

## Remaining US Treasury Borrowing Authority (EOY)




- 2008 Financial Information Plan:
  - Ensure that capital financing needs are covered over a rolling 10-year period.
  - Develop strategies and tools that extend BPA's period of sufficient access to capital.
  - Ensure that BPA is able to meet its capital requirements at low cost.

http://www.bpa.gov/Finance/FinancialInformation/FinancialPlan/Documents/BPA-financial-plan.pdf

# Radio Spectrum Status Update

Brian McConnell
Manager, Budget Planning and Forecasting

Shawna Lamothe
Financial Analyst, Budget Strategy and Forecasting

# Background on Radio Spectrum

- BPA has substantial telecommunications assets that it uses to operate the generation and transmission facilities of the Federal Columbia River Power System. BPA's telecommunications system has operated using frequencies that formerly were exclusively for Federal government usage. The National Telecommunications and Information Administration Organization Act provided for the reallocation from Federal use to Non-Federal use of certain telecommunications frequencies. The Spectrum Relocation Fund (SRF) was created to provide a centralized and streamlined funding mechanism through which federal agencies could recover the costs associated with relocating their radio communications from certain spectrum bands.

- The Commercial Spectrum Enhancement Act of 2004 provided for the sale of the 1710-55 MHz radio spectrum band by the federal government through a Federal Communication Commission auction. The "Federal Power Agencies", which were and still are uniquely exempt from relocation could "choose" and did choose to relocate from this frequency band.

- In March 2007, BPA received a non-expenditure transfer from the SRF of mandatory appropriation funds from the Office of Management and Budget. The funds came from the Federal government's auction of radio spectrum frequencies to private entities. BPA has received $48.6 million in such funds based on estimates performed in FY 2005 of the costs to move a portion of its operational communications systems from frequencies the government has auctioned for commercial use to the new government frequencies.

- These funds are dedicated to this project only and any unexpended funds at the end of the project will be returned to the U.S. Treasury.

# Accomplishments

- Between FY 2007 through FY 2013, BPA replaced and relocated fourteen 2 gigahertz (GHz) analog microwave communications systems to the 4 and 8 GHz federal frequency bands. This allows Advanced Wireless Services (including AT&T, Verizon, T-Mobile, Cricket, etc.) to operate '3G' (Third Generation) high speed mobile telecommunication devices in the auctioned 2 GHz band.

- BPA was able to replace nearly $40 million of aging equipment with new equipment without cost to ratepayers.

- All project work was completed as of October 2013. All system project timelines were met and costs were under budget.

- Upon project closeout, BPA estimates it will have approximately $8 million dollars of excess funds. Although the project is essentially finished, BPA plans to wait until FY 2015 to return the excess funds to the U.S. Treasury in case any unforeseen costs due to replaced microwave operational performance needs arise. BPA does not earn any interest income on these funds.

# Key Factors in Project Success

- BPA completed the project on time and well under budget. This was due to several key factors:

  - Effective project cost estimating: BPA's estimates were conservative as they included buffers for inflation and a contingency for work not initially scoped. Further, the estimates were based on the review and analysis of detailed site surveys. These estimating techniques resulted in BPA coming in well under budget.

  - Advance planning and analysis: BPA engaged in advance consultation with its Washington D.C. office, the DOE CIO radio spectrum planning staff, the National Telecommunication and Information Administration (NTIA) staff and management, and OMB staff on: draft legislation; BPA requirements for up-front funding, sufficient transition time for BPA certified reliable transition to the new operational telecommunication spectrum, to assure continued very high operational telecommunications system and FCRPS and FCRTS reliability.

# Key Factors in Project Success, cont.

- Advance planning and analysis, continued: The strategic BPA funding, timing, and reliability requirements were set by BPA Administrator Steve Wright and agreed to by the DOE Deputy Secretary. BPA also collaborated with DOE and OMB on the treatment of the Fund and conducted cross-agency planning sessions to discuss and analyze internal management before its receipt. BPA also conducted advanced detailed scoping of the radio sites to get an accurate picture of project requirements.

- Advanced planning of phased work over a multiple year time frame: This assured that mandated spectrum relocation frequency assignment releases were met per the committed NTIA schedule. Since BPA's participation was voluntary, Transmission was able to successfully integrate this effort with its normal scheduled capital and maintenance workload.

- Effective financial management: BPA's Finance organization conducted a thorough review of the applicable financial treatment of the Radio Spectrum Fund and worked in close consultation with DOE to determine the accounting and budget treatment for Radio Spectrum activities. In addition, effective processes and procedures were implemented to track and report activity associated with the Radio Spectrum Fund and strong internal controls over these processes were put in place.

# Radio Spectrum – What's Next?

## Project Closeout

- BPA plans to closeout the Radio Spectrum project in FY 2015. We will work closely with Treasury and OMB staff to ensure that we have returned all unspent funds and that there are no additional financial issues outstanding.

## Potential Future Projects

- Radio Spectrum, including federal spectrum, will only become more scarce over time.
- BPA may participate in a possible 2014 calendar year 1755-1780 MHz spectrum auction which may provide funds to relocate two BPA point-to-point microwave paths that currently have no scheduled capital funding for replacement.

# Follow-up on Functional Budgeting

Brian McConnell,
Manager, Budget Planning and Forecasting

# Brief Background

- During the 2010 Integrated Program Review (IPR), customers requested that BPA make changes to our budget development practices, including use of Zero-Based Budgeting.
- We committed to customers that we would evaluate our budget development process and compare it with other standard budgeting approaches, including Zero-Based Budgeting.
- At the July 2012 QBR, we reported back that we had concluded our evaluation of a handful of standard budgeting approaches and were going to implement Functional Budgeting for the 2014 IPR.

# Functional Budgeting Pilot

- BPA Finance developed a framework for implementing Functional Budgeting including a list of functions, a potential process that could be used to functionalize budgets, identifying existing financial data that could be utilized, and a draft of how budgets would roll-up to functions BPA-wide.
- At the direction of an executive team, we pursued a pilot implementation across four organizations (Energy Efficiency; Environment, Fish and Wildlife; Information Technology; Transmission Planning and Asset Management) prior to BPA-wide implementation.
- In early August, the results of the pilots were shared with the same team of executives and it was decided that we not pursue Functional Budgeting at this time.

# Considerations Behind Decision

- The pilots turned out to be considerably more work that initially anticipated.
- The use of existing data was almost eliminated completely due to the need to identify functions that were not currently being captured in our financial system.
- 75% of the pilot organizations had ways to mine their own functional data without using Functional Budgeting, limiting the perceived benefits of the pilot.
- Finding common functions across BPA and establishing a common level of granularity proved to be very challenging.
- The results of the pilot were presented in early August to an executive team at a time when BPA was going through significant organizational changes due to the inspection into BPA's hiring practices.
  - Ultimately, it was decided that BPA needed to focus its attention on maintaining the business, and it was not the appropriate time to start this new BPA-wide initiative.

# Instead of Functional Budgeting

- The customer request for BPA to use Zero-Based Budgeting came out of the 2010 IPR.
- BPA made significant changes to the IPR process between 2010 and 2012 including:
  - Pre-IPR GM Meeting; Initial IPR Publication: focused workshops based on customer requests; separate capital and expense public process; integrated Agency Services in business unit materials.
- Planning for the 2014 IPR:
  - Build on the improvements from 2012 and continue to be strategic when developing cost targets.
  - Follow our comprehensive schedule for Capital Investment Review (CIR), IPR, and debt management to clarify different processes and to better enable customers to get answers to their questions in the most appropriate venue.

# Update on NOS & Celilo Projects

Brian Scott
Supervisory General Engineer

# I-5 Corridor Reinforcement

**Project Description:** 79 miles new 500kV transmission line and 2 new substations

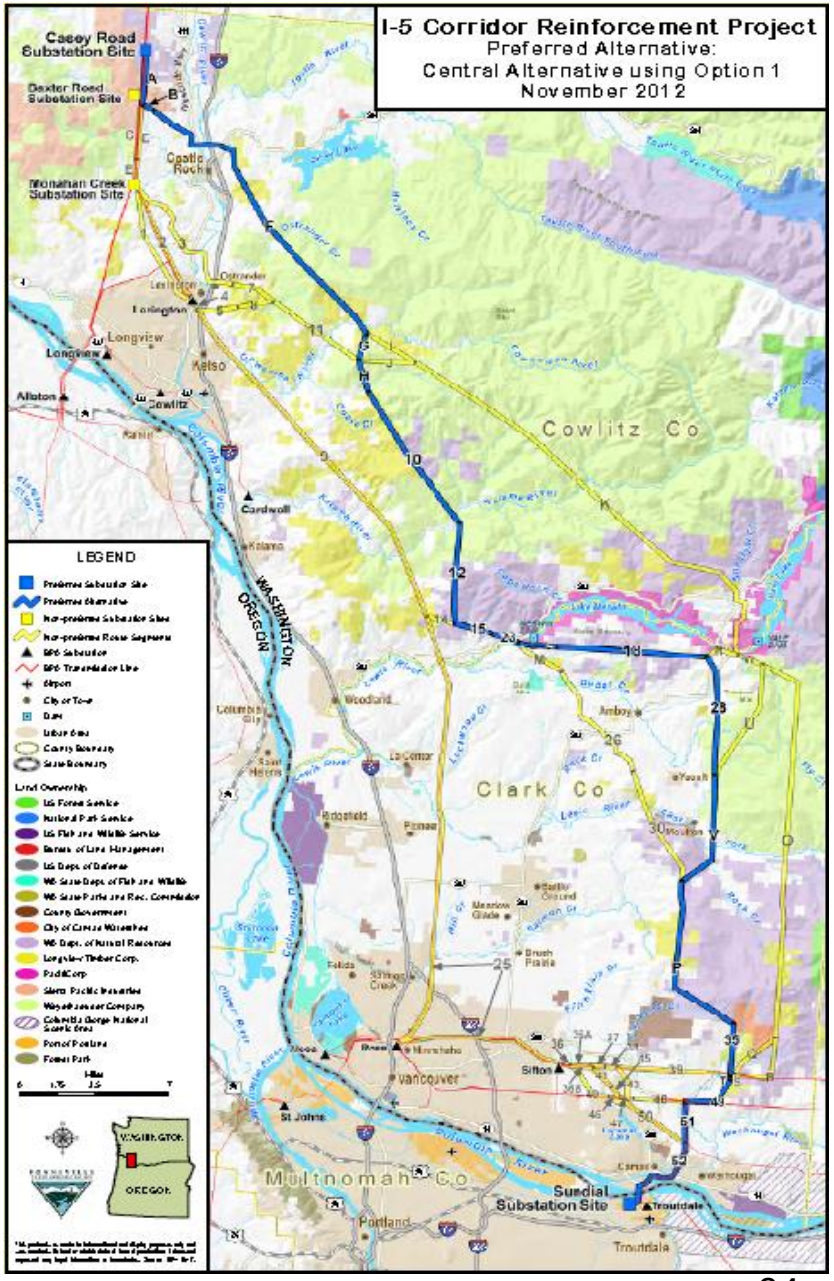
**PM:** Mark Korsness

## Schedule

- 2009 Feb. - Project approved and launched
- 2012 Nov. – Draft EIS and identification of preferred route, Central Alternative using Option 1
- 2013 March 25th – Close of formal comment period
- Early 2014 updated map of preferred route
- Late 2014 - Final Environmental Impact Statement (EIS) and Record of Decision (ROD)
- 2015 start construction (if decision to build)
- Spring 2018 – Energization

## Budget

- Total Project costs (Direct): $45 million
- National Environmental Policy Act (NEPA) and preliminary engineering costs (Direct): $45 million
- Actual costs to date (**Direct as of 8/16/13**): $33.3 million



## Activities:

### Last 30 days

- Team continued reviewing comments on Draft EIS and drafting responses.
- PM and siting team continued working with land owners to consider adjustments to preferred route tower and road locations.
- Team has secured limited temporary access agreements with large land owners, including Weyerhaeuser, DNR, Longview Timber, Sierra Pacific (new), Port of Portland, PAC, PGE, City of Camas, and City of Washougal.
- Realty Team has secured Permission to Enter Properties (PEP's) and with high percentage of small landowners.

### Next 30 days

- Team will continue reviewing comments on Draft EIS and drafting responses.
- PM and siting team will continue working with landowners and will start making some of the tougher decisions about adjustments to preferred route tower and road locations.
- Team will work to modify access agreements with large land owners as work scope expands over time.
- Realty Team will continue to secure Permission to Enter Properties (PEP's) and will follow up with non-responsive small landowners.
- Team will work more closely with DNR about sub site and it's access road near Castle Rock.

# Big Eddy-Knight West of McNary Reinforcement

**Project Description:** 28 miles new 500kV transmission line, Big Eddy Substation bay addition new Knight Substation; (Phase 1); New fiber on Knight-Wautoma, new 500kV reactor at Wautoma Substation (Phase II).

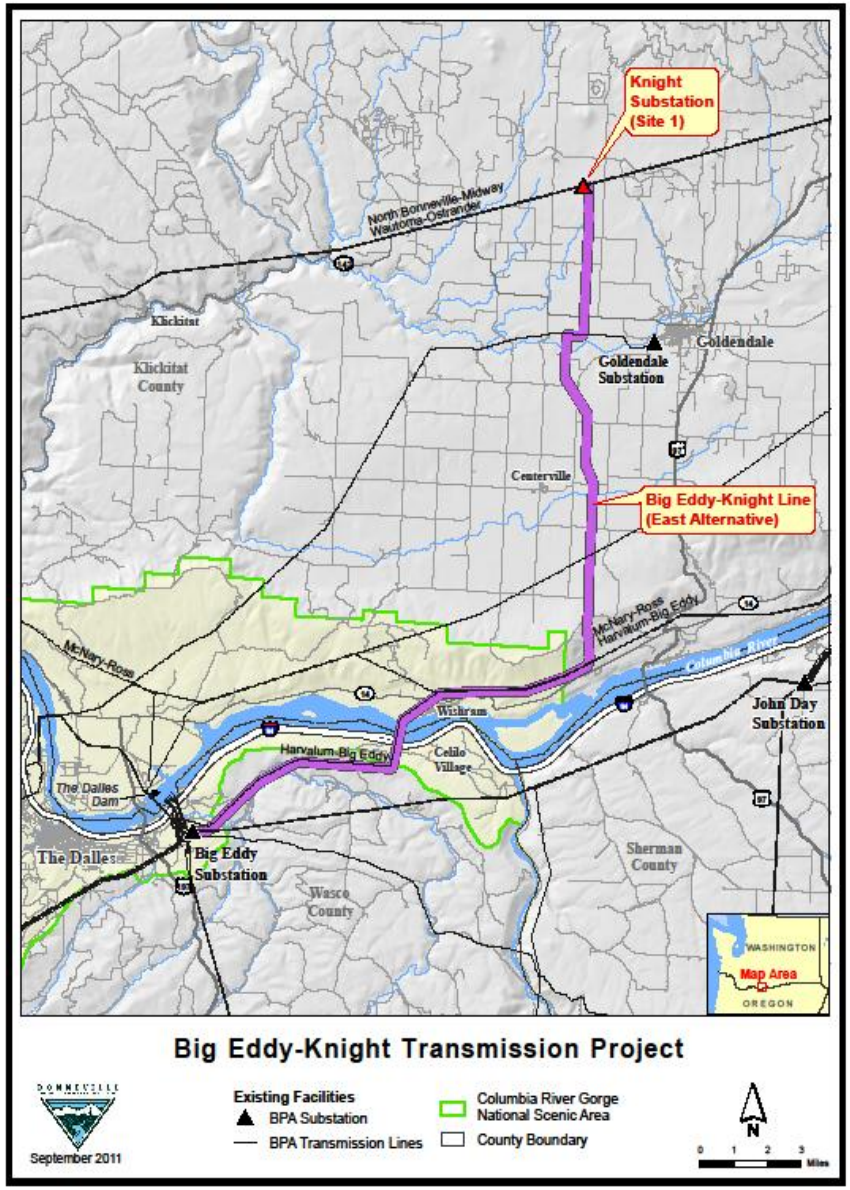
**PM:** Emmanuel Jaramillo

## Schedule

- 2009 Feb. - Project planning approved and launched
- 2011 Sept. - Record of Decision
- 2014 Dec. – Energization and Tentative date of project completion

## Budget

- Total Project costs (Direct): $180 million
- Actual costs to date (Direct as of 10/18/13): $147.7 million



## Activities:

### Last 30 days

- Received the National Keeper's formal letter on determination of eligibility in favor of BPA.
- Cultural surveys on the Knight-Wautoma fiber effort is complete.
- Wautoma reactor work continues.
- Renewal of land permits continues.
- Deliberation with condemned land owners continues.

### Next 30 days

- Initiate Categorical Exclusion (CX) document for Knight-Wautoma fiber .
- Continue to assist Department of Justice with condemnation proceedings.
- Meet and discuss mitigation plan with Washington State Historical Office regarding Columbia Hills Archaeological District.
- Coordinate with the Confederated Tribes of the Umatilla Indian Reservation regarding the mitigation for their Traditional Cultural Property sites.
- Continue land permitting renewal process.

# Central Ferry-Lower Monumental

**Project Description:** 40 miles of new 500kV transmission line, Central Ferry and Lower Monumental Substation Bay Additions

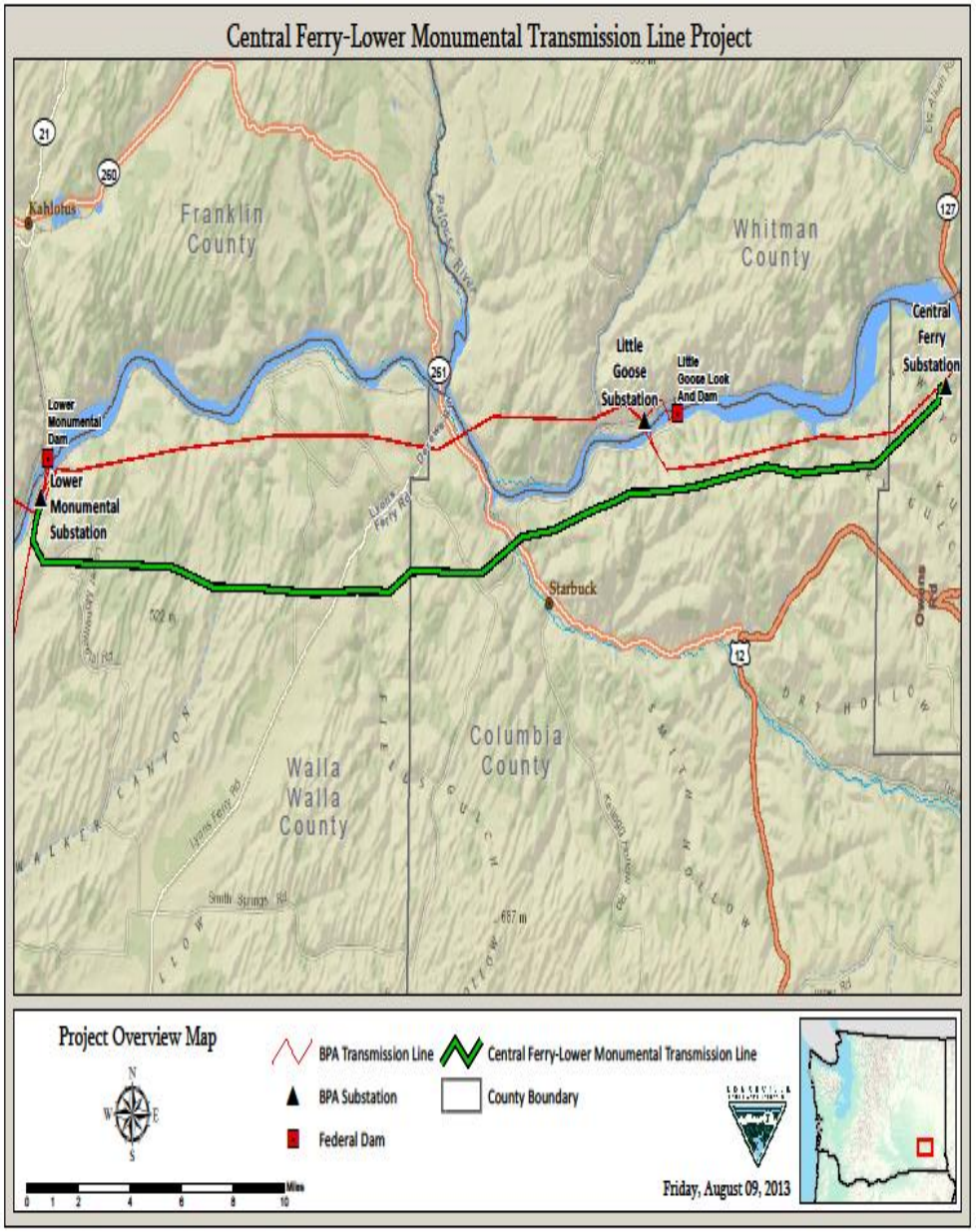
**PM:** Theresa Berry

## Schedule

- 2009 Feb. - Project approved and launched
- 2011 March - Final Environmental Impact Statement (EIS) and Record of Decision (ROD)
- 2014 Spring- Construction Start
- 2015 December – Energization

## Budget

- Total Project costs (Direct): $90 million
- National Environmental Policy Act (NEPA) and preliminary engineering costs (Direct): $6.5 million
- Actual costs to date - $19.9 million



## Activities:

### Last 30 days

- Transmission line right-of-way acquisition in progress.
- Outreach to tribal entities and WA SHPO complete.
- Biologic and Cultural Surveys complete.
- Substation Design Team has been deployed to refresh or update designs at five Substations under this project.
- Request For Offers out for Line work on 10/18/2013

### Next 30 days

- Transmission line right-of-way acquisition continues.
- Work on Environmental Supplement Analysis to EIS
- Continue with Substation Design refresh.
- Bidders Tour for the line work

# Montana To Washington Transmission Upgrade Project (M2W Project)

**Project Description:** Upgrades five existing substations, adds a new compensation substation, and upgrades 12-miles of Transmission line between Taft and Dworshak substations.

**PM:** Amit Sinha

## Schedule

- Draft EIS – September 2014
- Final EIS and Record of Decision August 2015
- December 2018 – Completion

## Budget

- Total Project costs (Est. Direct): $146 million (Direct)
- National Environmental Policy Act (NEPA) and preliminary engineering costs (Est. Direct): $7.0 million
- Actual costs to date - $0.5 million

## Activities:

### Past

- Scoping meeting with Public conducted in May and June 2012

### Next 30 Days

- Continue Section 106 Consultations, Government- to-Government consultation with Tribes.
- Continue Development of Draft EIS.

# Pacific Direct Current Intertie Upgrade

**Project Description:** Replace the aging Celilo four converter terminal with a new two converter terminal rated for 3800MW and upgrade the Celilo-NOB (Nevada/Oregon Border) transmission line to support operation up to 3800MW.

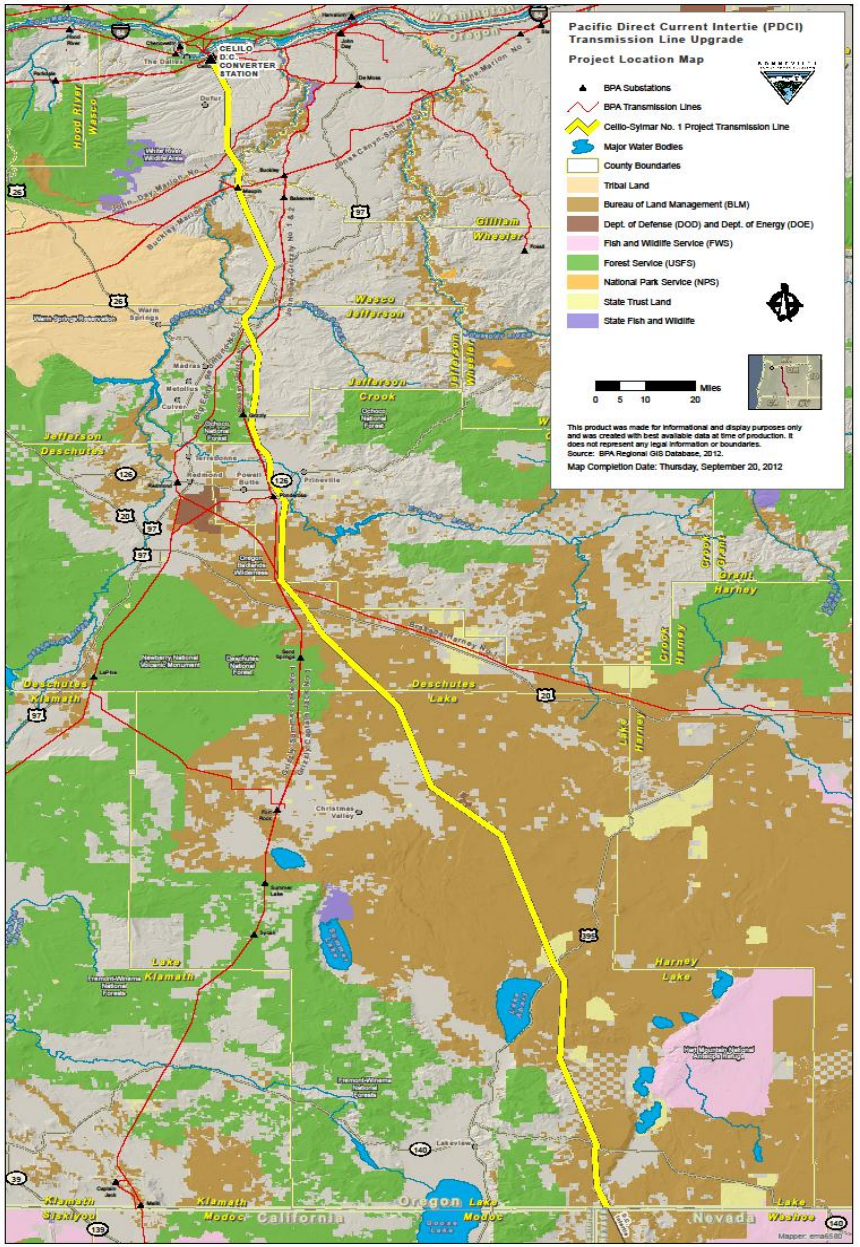
**PM:** Erich Orth

## Schedule

- 2011 Dec. – Project Business Case approved
- 2012 Dec. – Award HVDC Converter Replacement contract to ABB
- 2013 July – Completed NEPA for Celilo Converter Replacement
- 2014 May – Complete NEPA for Celilo –NOB Upgrade
- 2016 Jan. – Energize Celilo Converter Station with New Converters
- 2016 Nov. – Complete Upgrade of Celilo-NOB to increase PDCI transfer capacity to 3220MW

## Budget

- Total Project costs (Direct): $325 million
- Actual costs to date - $41.1 million (Direct)



## Activities:

### Last 30 days

- Held BPA/ABB Design Review Meeting
- Continued work on ABB engineering studies
- ABB started detailed design work for converters
- BPA continued design work and material strategy on line upgrade
- Continue NEPA work on line upgrade

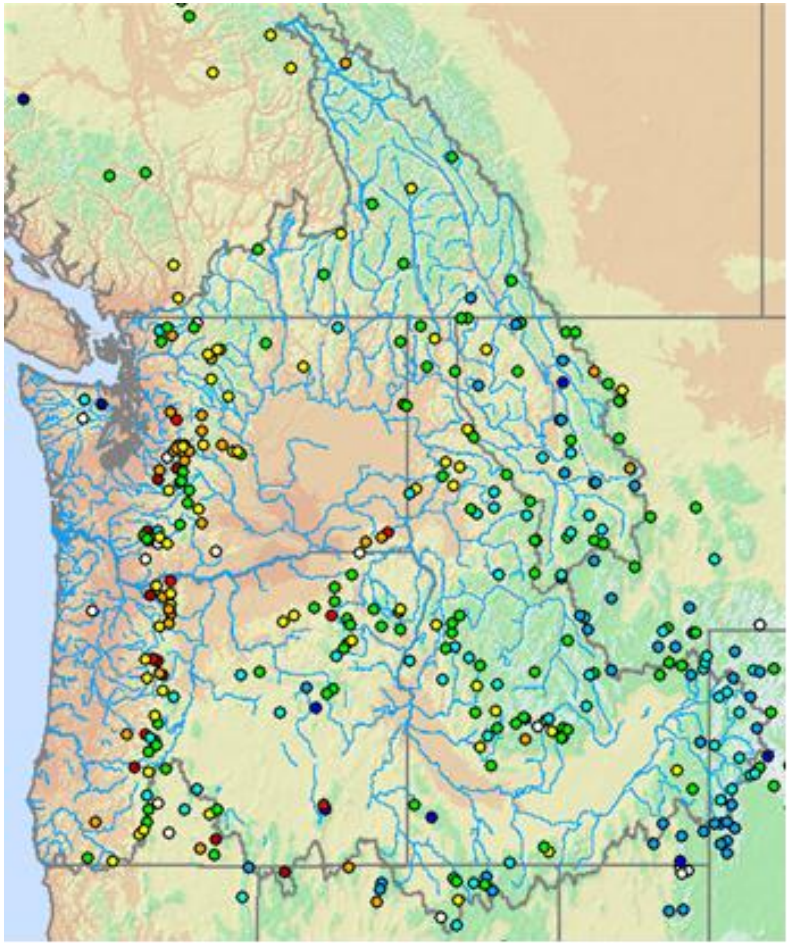
### Next 30 days

- Complete ABB engineering studies
- ABB to continue detailed design work on converters
- Witness testing of Converter Transformer Bushing
- Continue design and NEPA work on line upgrade
- Begin to order material for line upgrade
- Award contract to re-configure interior Celilo space

# Canadian Real Time Snowpack Monitoring Network Expansion

Erik Pytlak
Weather and Streamflow Forecasting

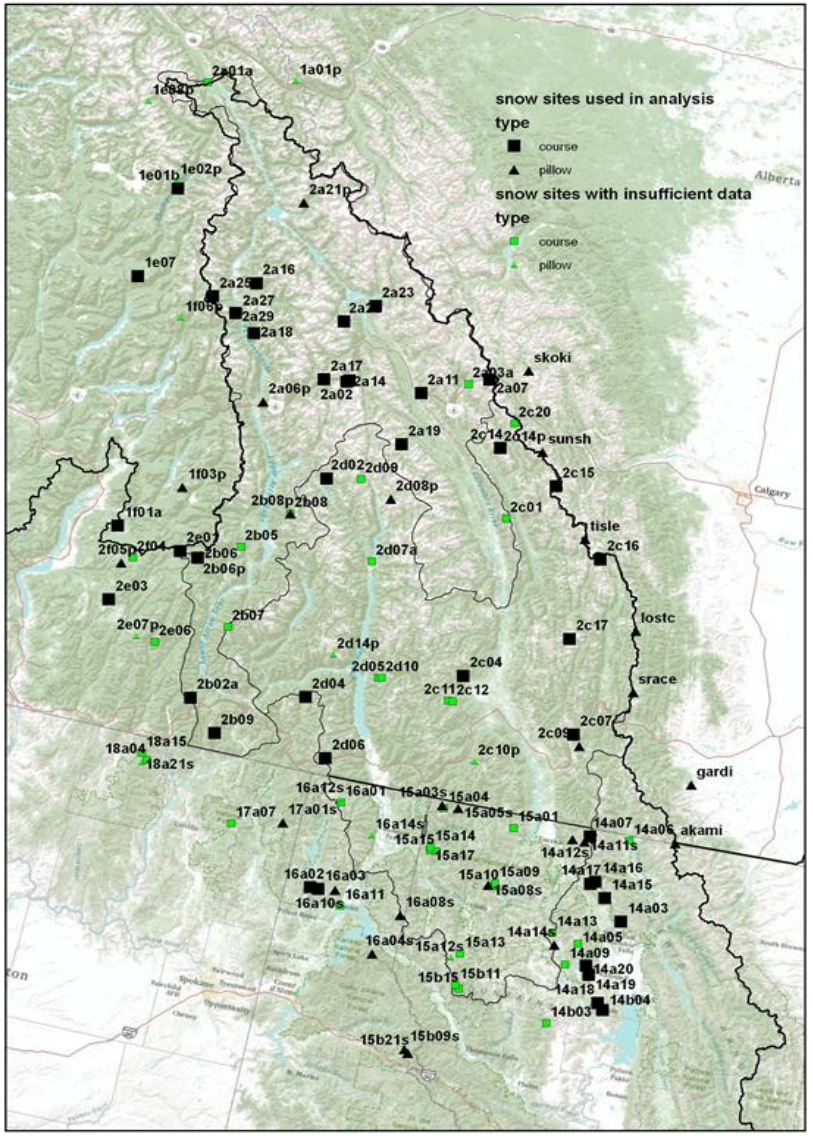
# Snow Monitoring Network: 2011



- 30% of our runoff originates from Canada
- Over 200+ real-time snowpack monitoring sites in the US part of the basin, but only 10 in BC portion of the Columbia
- Existing BC network heavily concentrated in Kootenay and Okanagan Basins, with only one site above Revelstoke
- VERY remote areas in the Canadian Columbia
  - Very few roads or trails
  - Very steep slopes
  - Snow is on the ground 9+ months of the year

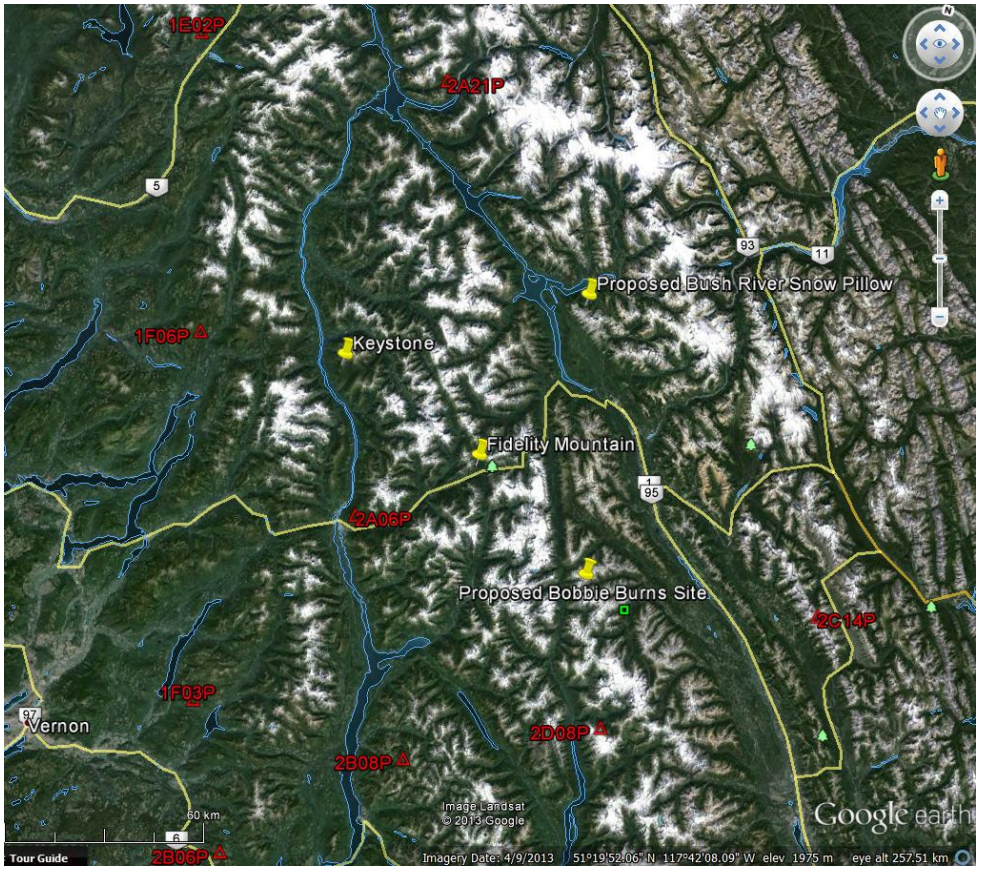
# PGPW Sensitivity Study: 2009-10

- Original plan: 5 sites
- Principal Component and GIS Analysis
  - Identify sites with the greatest potential to improve forecasts
  - Some locations may “look” like good candidates, but existing sites may already be good proxies for snowpack monitoring
- Peer reviewed by BC Hydro
- Coordinate with BC Hydro on prohibitive locations
  - Avalanche zones
  - Dangerously steep slopes for installation/repair crews
  - Cultural sites
  - Unsheltered/unforested areas (too much wind and drifting snow)
  - Recreation sites (i.e. hang gliding paths)



# Final Locations and Installation Info

- Final plan: 4 sites
  - 2013 Installation
    - Keystone Mountain
  - 2014 Installation
    - Bush River
    - Bobbie Burns
    - Mt. Fidelity
- 50-50 cost share between BPA and BC Hydro
  - Installation: $226,330 over 2 years (FY2013 and 14) (NTE $300,000)
  - So far, costs are running slightly under budget
    - BC Hydro forward purchased most of the equipment
  - Maintenance: ~$18,000/year
  - Number #1 cost variable: helicopters



# Expected Benefits

- For BPA:
  - Real-time (hourly) snow pack monitoring (instead of once a month)
  - Real-time weather forecast verification (installations also include temperature and precipitation sensors)
  - Allow BPA to make more accurate water supply forecasts at mid-month (or at even finer time-steps)
  - Better inform, collaborate, and optimize non-treaty storage/release decisions between BC Hydro and BPA

- For our Partners:
  - BCHydro: Exactly the same benefits as BPA receives
  - NOAA/NWS: More frequent information to update their daily ESP/water supply forecasts
  - Corp of Engineers: Additional information to monitor upstream flood potential
  - Regional Stakeholders: Ability to monitor snowpack conditions with us over remote areas of the Canadian Columbia
  - Will eventually add to the long term climate monitoring database

# Before

# Arriving on site

# Installation of tower and snow pillow

Filling pillow with propylene glycol

# Finished station

- Temperature sensor
- Precipitation gauge
- Antennae
- Logger shelter
- Snow pillow (covered with metal sheet and mesh)

# 100% Wood Pole Fall Protection

Darlene LaBrosse
Manager, District Operations and Maintenance

Mission
The Fall Protection Committee is dedicated to reducing fall related injuries and fatalities at Bonneville Power Administration.

# Areas of Focus

*Each employee exposed to fall hazards above **four feet** while ascending, descending or moving point to point at heights must be protected at all times.*

*Current areas of focus for the Fall Protection Committee are:*

- Wood poles
- Lattice steel
- Equipment in substation yards
- Rescue

# Administrative Controls

*Part of the fall protection hierarchy is to reduce exposure to hazard by implementing different work practices to accomplish the same task*

Improved landings and increased use of aerial equipment

✔ Changes to Work Standards and Guides

**TRANSMISSION LINE MAINTENANCE STANDARDS AND GUIDES** **Section III.A.8**
**ADMINISTRATIVE** **Page 2 of 7**

**Working Patrol**

A working patrol shall include inspecting every structure in the line being patrolled, plus driving or walking the right-of-way between each structure. In addition to the transmission line, include an inspection of the terminal spans and structures.

It is recognized that for safety reasons not all spans may be walkable. The patrolman shall make every effort to inspect every structure. Other inspection tools and procedures shall be utilized.

- Patrol all Lines a minimum of once every maintenance year.
- Urban Areas or other restricted areas not patrolled by helicopter shall be documented in TLM apps .The district foreman will determine on a case by case basis the ground patrol frequency of these lines not patrolled via helicopter. At least one ground patrol being minimum, more if conditions warrant.

Lines that are not patrolled by helicopter or radial lines may require an additional working patrol at the discretion of the Region.

**Steel Tower Climbing Inspection**

| | |
|---|---|
| • WECC/Significant Equipment Lines (OB19) | 1x every 10 years |
| • Critical crossings* | 1x every 5 years |
| • Communication Towers ** | 1x every 5 years |
| • Other structures | 1x every 10 years |

✔ Reinforcing current work practices such as Qualified Climbers

| | | |
|---|---|---|
| *S*afety and *H*ealth *P*rogram *H*andbook | Section A: Policies and Protocols **Safety Training** | Section: **A**<br>Chapter: **4**<br>Page: **2**<br>Date: **05/01/2009** |

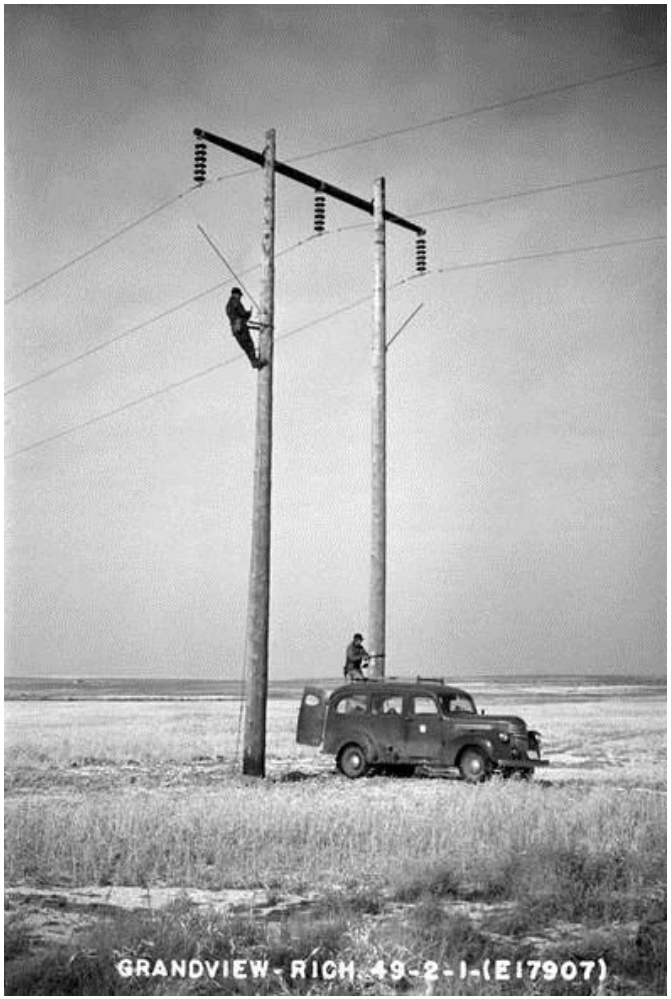
refresher. Reference Safety & Health Program Handbook, Section F, Chapter 2. Scheduled through Technical Training.

- Qualified Climber's Recertification/Climber's Rescue - required annually - 4 hrs. Electricians, Linemen and some PSC (for all qualified climbers). Annual Qualified Climber Compliance Record (BPA F 5480.06e) required to be completed annually by supervisor. Reference Safety & Health Program Handbook, Section B, Chapter 7. Usually scheduled through the Region (in-house).

# ✔ Wood Poles

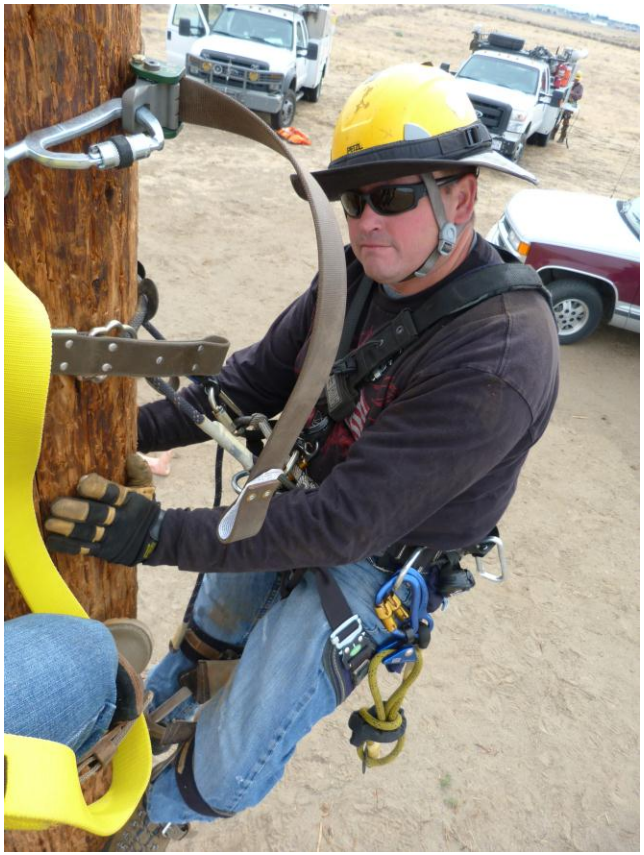
70,000 poles

*with maintenance requirements*



# Fall Protection on Wood Poles

Linemen from the Fall Protection Committee field tested wood pole fall restricting devices (WPFRD), and rescue harnesses – in order to find the most workable product.



In the early Spring, Linemen were sized for harness fit and made their selection of harness style and WPFRD offered.

# Fall Protection on Wood Poles

- WPFRDs and harnesses were purchased for all journeyman linemen.
- Training was conducted from mid-May through the end of July at the Hammer Training Facility in Richland, WA.

# Fall Protection on Wood Poles

On August 1st, 2013 – The work standard requiring BPA Linemen to be fall protected on wood poles went into effect.

- Met our target on fall protection on wood poles **on time and under budget**
  - WPFRD cost $125,000
  - Harnesses & rescue kits cost $400,000

# Rescue

*With fall protection we are arresting a person's fall and by doing this….*
*We are moving the rescue from the ground into the air.*

# Rescue

- *Creating a more robust training program*
  - Formalized rescue training to cover all employees working at 4 feet and above
  - Implementing “Train the Trainer” program
  - Purchasing
- *Increasing awareness*
  - For the importance of rescue preparedness and practice due to the danger of suspension trauma
    - also known as orthostatic shock, an effect which occurs when the human body is held upright without any movement for a period of time.
  - Required use of harnesses equipped for rescue
  - Required use of trauma straps with all harnesses

Example of a harness equipped for rescue and trauma straps.

# Rescue Training

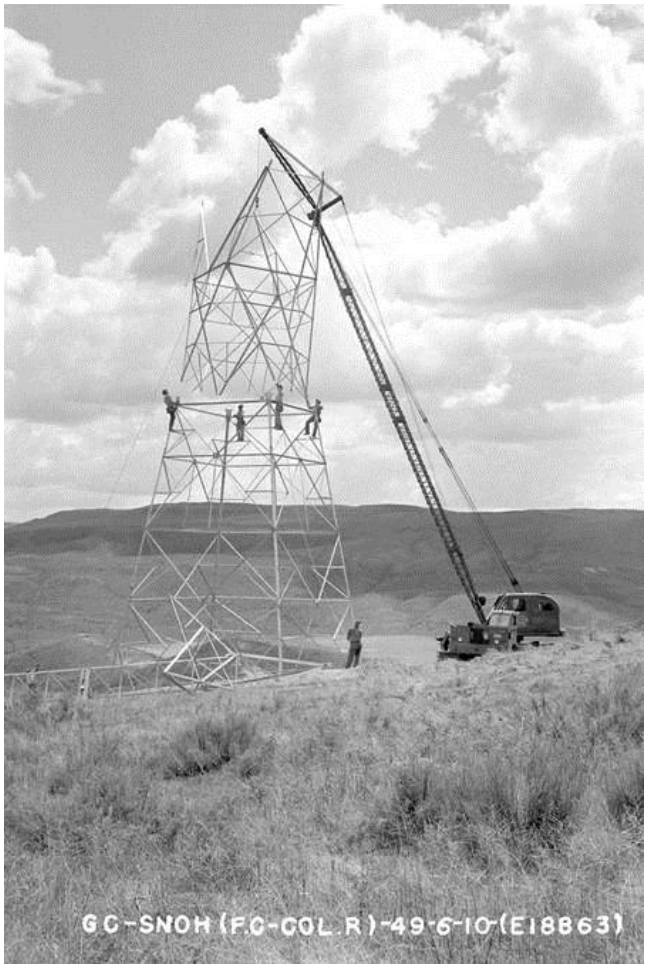
FPC lineman giving instructions during rescue training in 2013.

DEUS rescue device

- Training was held mid-May through the end of July 2013, for TLM at the Hammer Training Facility in Richland, on the use of DEUS rescue devices.
- We are in the process of purchasing DEUS rescue devices for Electricians.
- Plans are underway for training the trainers who will train electricians, mechanics, welders and facility maintenance workers in FY2014.
- We are purchasing additional DEUS rescue devices to be used for ad hoc practice/training when time permits.
- TLM's annual training for 2014 will be held mid-May through July.

# Lattice Steel

43,000 Structures with over 400 different designs




**On steel towers, there are 3 challenges**

- Vertical ascent of towers
- Horizontal movement on the tower and the challenges to anchor travel restraint systems
- Design new structures to include anchorage points, and reviewing old designs to identify anchorage points

# Lattice Steel

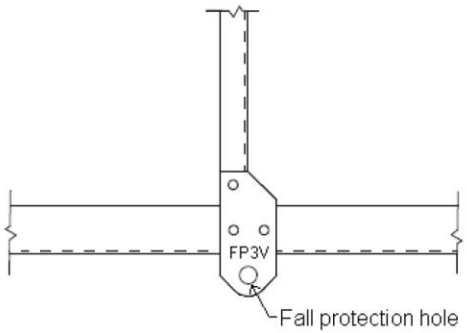
## Future Tower Designs

***Fall protection will be included as design consideration***

- Engineered anchorage points on the structure
- Anchorage location and availability
- Permanent vertical lifelines/ladders/step bolts

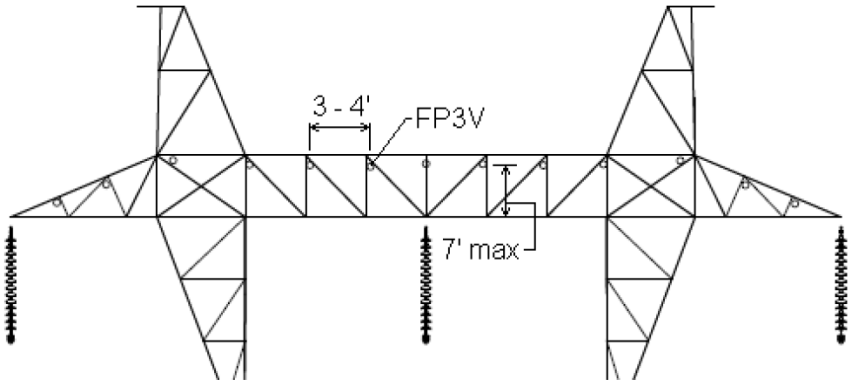
All FP holes are to be stamped near the hole with an identifying mark similar to the following examples

a. FP3V: 3000 pounds vertical
b. FP5H4V: 5000 pounds horizontal and 4000 pounds vertical




Moving across bridge and arms

a) Provide FP3V attachments at spacing adequate for lineman to maintain attachment to at least one hole when moving across bridge and arms (3 – 4'). Locate holes near top of bridge but within reach (7' max).



# In the Substation Yards

## 700 Transformers and Reactors

**Fall Arrest Post or Rail System**

Needs a welded base plate for the fall arrest post

Districts have been surveyed for number of completed transformers and reactors

Remaining transformers and reactors will have a corrective work order created

**Future Design**

Engineering design has included fall protection criteria in the new transformer design specifications

- Base for fall protection post
- Post holders for handrail system
- Slip resistant paint

## ✔ 2013 Accomplishments

- Creation of the Fall Protection Committee 2/1/13
- Visited Duke Energy and Pennsylvania Power & Light to research and understand their work practices in fall protection
- Implemented administrative changes for fall protection
- Future tower designs will include anchorage points for FP
- Field tested and purchased harnesses equipped for rescue and wood pole fall restricting devices for TLM
- Distributed FP equipment and trained all TLM linemen
- Implemented fall protection on wood 8/1/13

## 2014 Work Plan

- Purchase DEUS rescue kits and harnesses for all other crafts
- Purchase additional DEUS rescue devices for ah hoc practice/training
- Plan and execute “Train the Trainer” concept
- Plan and execute FP training for all crafts through the “Train the Trainer” concept
- Hold Annual Rescue training for TLM
- Purchase spotting scope and digital camera setups for TLM crews
- Change work standard for steel structure climbing inspections
- Work to develop rope access program for lattice steel
  - Obtain SPRAT certification
  - Continue to test rope
- Review existing tower designs to identify anchorage points.

# Ultimately the end result will be…..

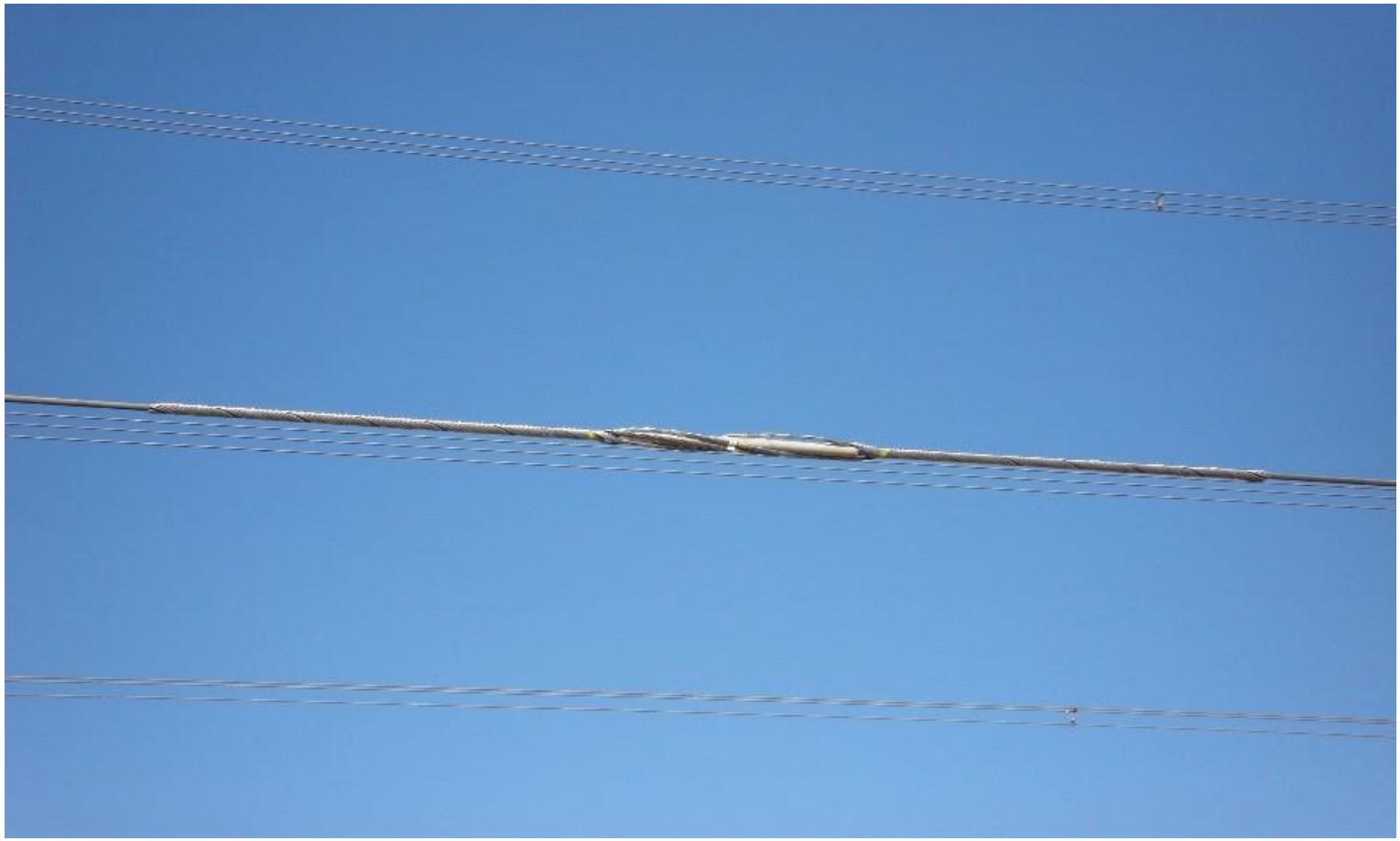
A fall protection program where workers have the knowledge to best determine the applicable type of fall protection to use in a given situation.

# Occupancy Sensors Project

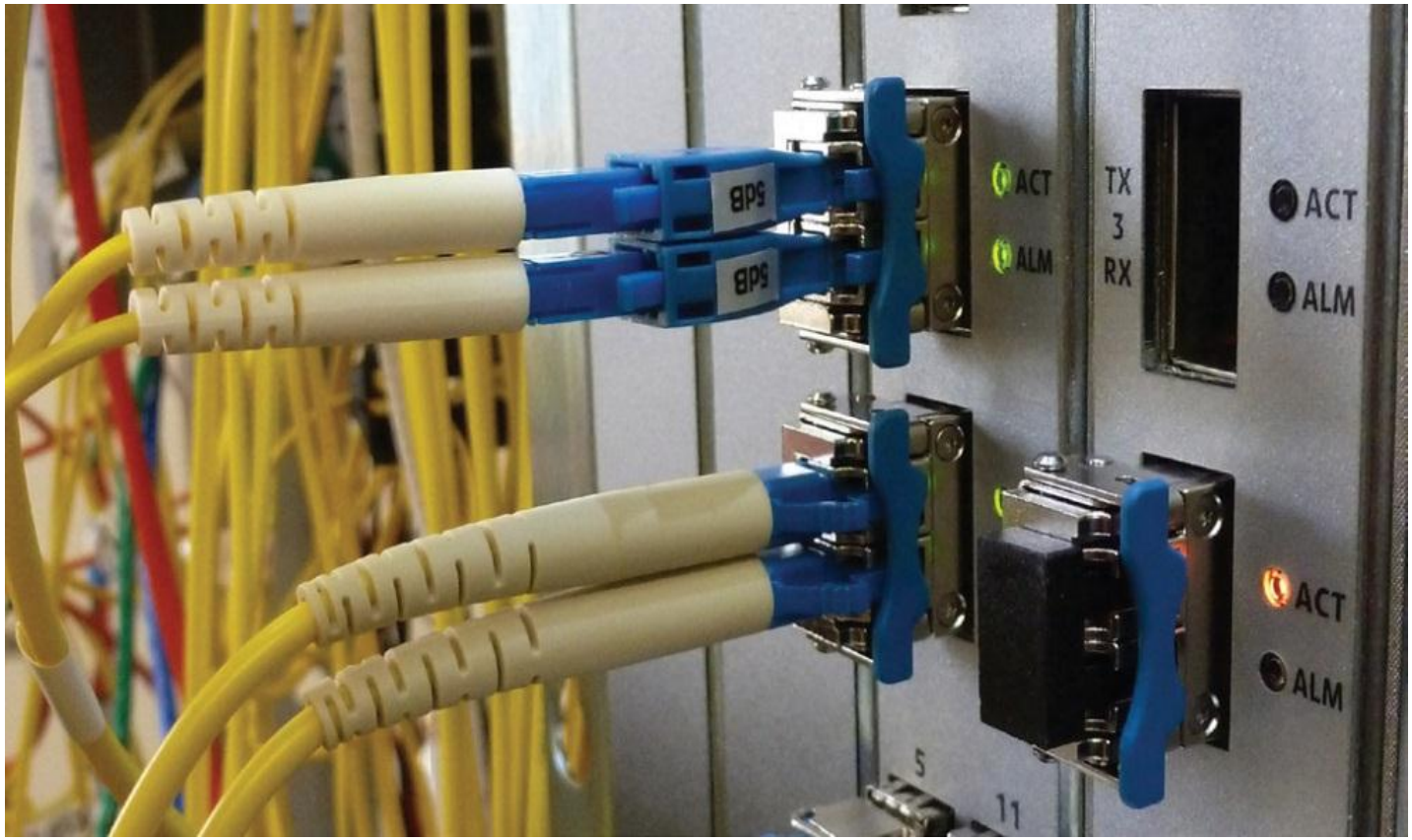
Sheila Bennett
BPA Technology Innovation Office

Mira Vowles
BPA Energy Efficiency Emerging Technologies

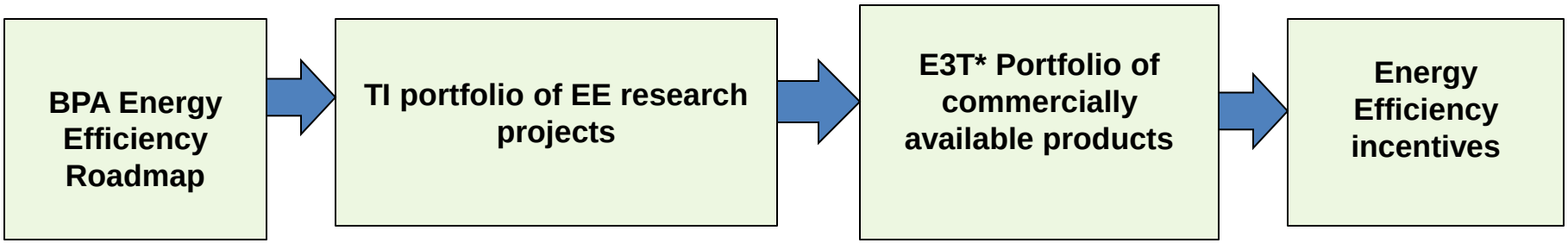
# Splice Shunt For High Temperature Operation



# Operational Multi-Gigabyte Ethernet Transport

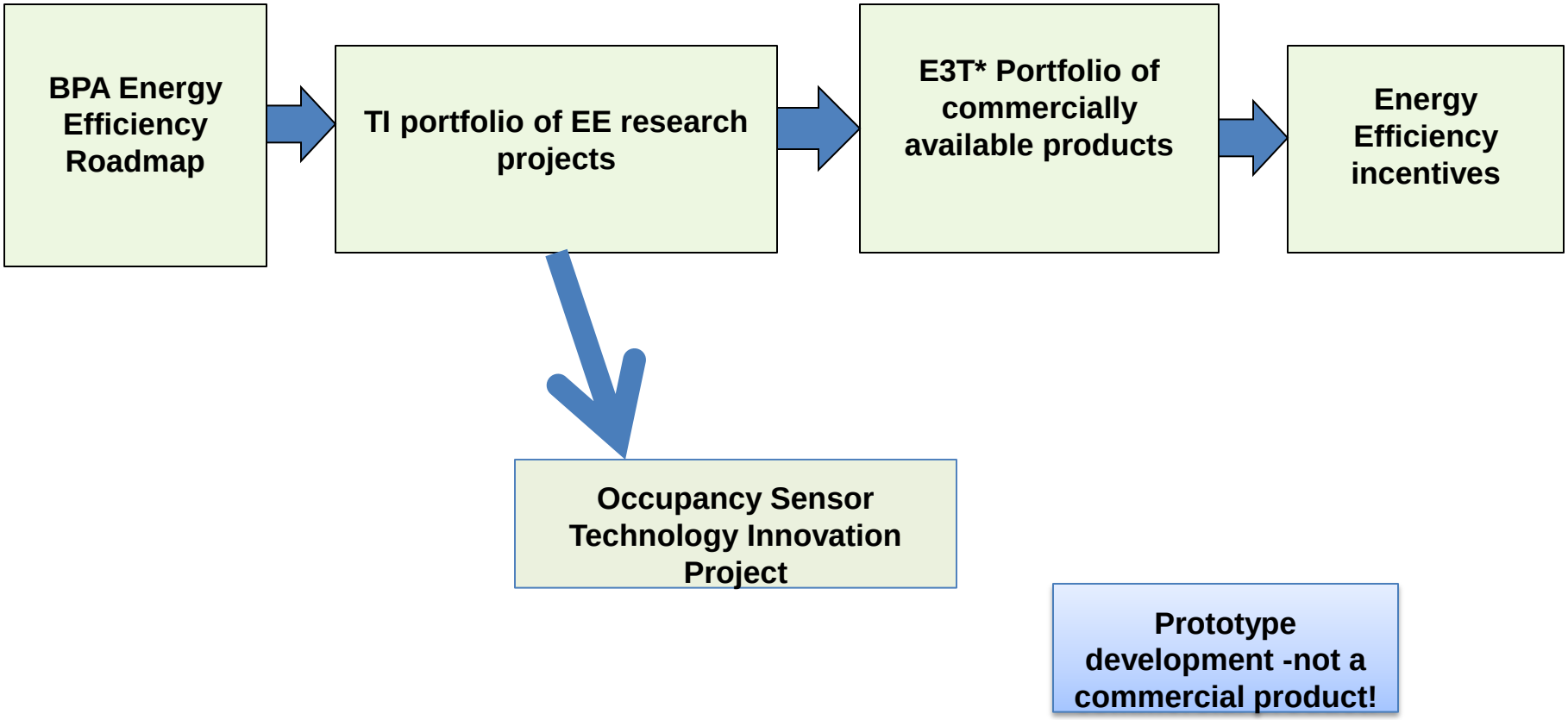


# Technology Innovation and E3T* Portfolios




* E3T = Energy Efficiency Emerging Technology

# Technology Innovation and E3T* Portfolios



# Occupancy Sensor Technology Innovation Project

- Co-funded by the Department of Energy
- Principal Investigator: Luigi Gentile Polese, National Renewable Energy Laboratory

*NREL PIX 19567*

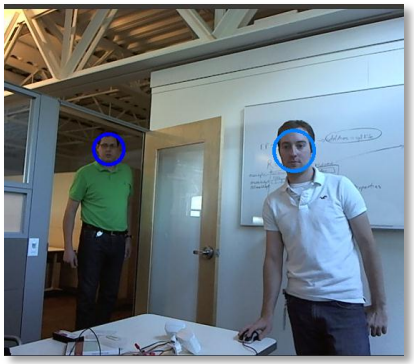
# Why improve occupancy sensors?

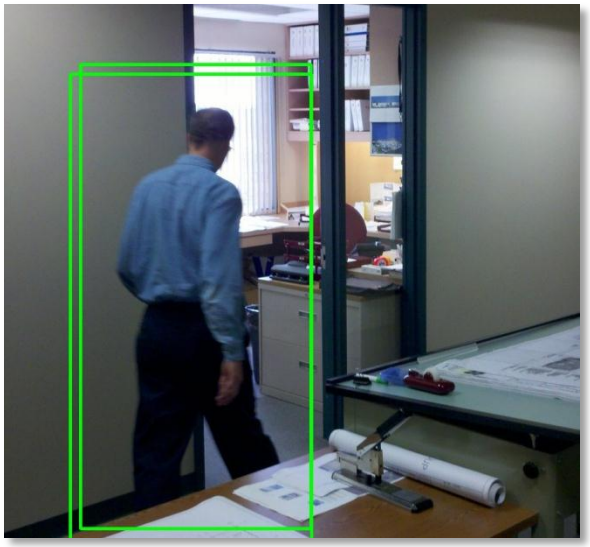

Potential to save 32.7 aMW in Pacific Northwest

# Image Processing Occupancy Sensor (IPOS)


Uses smart phone camera

# IPOS –new occupancy detection strategy



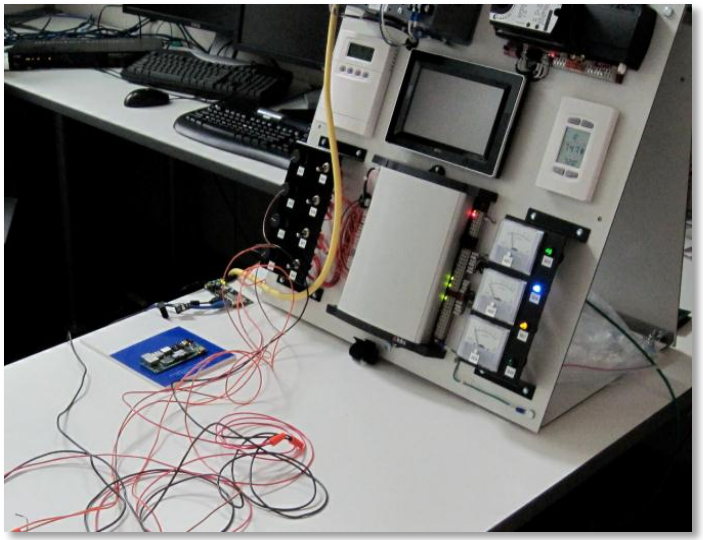


Uses face and people recognition

# IPOS –new occupancy detection strategy

Digitally filters out stationary components and creates motion vectors

# IPOS –new occupancy detection strategy



Integrates with building automation systems for occupancy-based lighting, ventilation and temperature setback energy savings

# IPOS –new occupancy detection strategy


Multiple detection zones using one sensor

# Occupancy Sensor TI Project Results


- Successful proof-of-concept
  - 39% more accurate than current sensors
- Recipient of 2013 R&D 100 Award

# Other IPOS Use Cases


- Daylight Harvesting Commissioning
- Daylight Harvesting and Occupancy Control
- Occupancy and Event Logger
- Light Logging

# Non-Energy IPOS Use Cases

- Alarm if walk-in door is left open
- Log time walk-in door is open
- Interactive Exhibit Control
- Space Planning/Management

# When will IPOS be commercially available?


- NREL is actively seeking commercialization partners
- NREL has talked with dozens of interested companies
- Not currently licensed

# Questions?

# Appendix 1

Report ID: 0020FY13
Requesting BL: CORPORATE BUSINESS UNIT
Unit of measure: $ Thousands

## FCRPS Summary Statement of Revenues and Expenses

Through the Month Ended September 30, 2013
Preliminary/ Unaudited

Run Date/Run Time: October 21,2013/ 04:47
Data Source: EPM Data Warehouse
% of Year Elapsed = 100%

| | | A | B | C | D <Note 1 | E |
|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals: FYTD |
| | **Operating Revenues** | | | | | |
| 1 | Gross Sales (excluding bookout adjustment) <Note 3 | $ 3,241,564 | $ 3,346,003 | $ 3,229,115 | $ 3,262,437 | $ 3,242,157 |
| 2 | Bookout adjustment to Sales | (61,972) | - | - | (58,870) | (66,587) |
| 3 | Miscellaneous Revenues | 56,675 | 58,137 | 65,796 | 76,893 | 82,019 |
| 4 | U.S. Treasury Credits | 81,583 | 100,447 | 85,999 | 92,777 | 88,692 |
| 5 | **Total Operating Revenues** | **3,317,850** | **3,504,586** | **3,380,909** | **3,373,237** | **3,346,281** |
| | **Operating Expenses** | | | | | |
| | Power System Generation Resources | | | | | |
| | Operating Generation Resources | | | | | |
| 6 | Columbia Generating Station | 292,636 | 345,945 | 338,267 | 330,147 | 330,066 |
| 7 | Bureau of Reclamation | 89,005 | 119,891 | 132,391 | 128,691 | 127,116 |
| 8 | Corps of Engineers | 206,967 | 215,700 | 215,700 | 215,700 | 208,096 |
| 9 | Long-term Contract Generating Projects | 25,869 | 25,831 | 26,008 | 23,490 | 22,518 |
| 10 | Operating Generation Settlement Payment | 20,437 | 22,148 | 20,785 | 22,121 | 22,122 |
| 11 | Non-Operating Generation | 2,153 | 1,948 | 2,316 | (22,400) | (25,878) |
| 12 | Gross Contracted Power Purchases and Augmentation Power Purch | 205,350 | 164,905 | 119,364 | 191,973 | 220,987 |
| 13 | Bookout Adjustment to Power Purchases | (61,972) | - | - | (58,870) | (66,587) |
| 14 | Exchanges & Settlements <Note 3 | 203,712 | 201,760 | 203,200 | 202,689 | 201,933 |
| 15 | Renewables | 33,912 | 37,958 | 37,956 | 36,140 | 30,057 |
| 16 | Generation Conservation | 37,505 | 47,850 | 47,850 | 41,396 | 36,078 |
| 17 | **Subtotal Power System Generation Resources** | **1,055,573** | **1,183,936** | **1,143,838** | **1,111,077** | **1,106,508** |
| 18 | Power Services Transmission Acquisition and Ancillary Services - (3rd Party) <Note 2 | 51,274 | 55,035 | 55,035 | 55,135 | 53,113 |
| 19 | Power Services Non-Generation Operations | 79,794 | 90,210 | 89,537 | 84,076 | 79,254 |
| 20 | Transmission Operations | 121,792 | 133,590 | 131,248 | 123,016 | 114,942 |
| 21 | Transmission Maintenance | 135,377 | 150,831 | 153,278 | 148,808 | 146,933 |
| 22 | Transmission Engineering | 46,111 | 32,803 | 41,855 | 42,493 | 45,876 |
| 23 | Trans Services Transmission Acquisition and Ancillary Services - (3rd Party) <Note 2 | 18,093 | 11,590 | 9,381 | 11,341 | 13,118 |
| 24 | Transmission Reimbursables | 8,241 | 9,914 | 9,682 | 11,725 | 15,401 |
| 25 | Fish and Wildlife/USF&W/Planning Council/Environmental Requirements | 279,641 | 281,129 | 282,067 | 281,104 | 277,237 |
| | BPA Internal Support | | | | | |
| 26 | Additional Post-Retirement Contribution | 34,486 | 35,641 | 35,064 | 35,642 | 35,641 |
| 27 | Agency Services G&A | 109,854 | 113,623 | 110,942 | 113,751 | 111,976 |
| 28 | Other Income, Expenses & Adjustments | (216) | - | (2,297) | 1,319 | (1,851) |
| 29 | Non-Federal Debt Service | 659,680 | 758,196 | 732,138 | 733,281 | 733,313 |
| 30 | Depreciation & Amortization | 389,097 | 432,451 | 408,383 | 421,658 | 429,716 |
| 31 | **Total Operating Expenses** | **2,988,798** | **3,288,949** | **3,200,151** | **3,174,426** | **3,161,176** |
| 32 | **Net Operating Revenues (Expenses)** | **329,052** | **215,637** | **180,759** | **198,811** | **185,106** |
| | **Interest Expense and (Income)** | | | | | |
| 33 | Interest Expense | 331,732 | 428,123 | 363,288 | 357,183 | 356,337 |
| 34 | AFUDC | (45,845) | (45,847) | (46,810) | (42,635) | (37,529) |
| 35 | Interest Income | (43,587) | (38,223) | (28,760) | (30,685) | (28,937) |
| 36 | **Net Interest Expense (Income)** | **242,301** | **344,053** | **287,718** | **283,863** | **289,871** |
| 37 | **Net Revenues (Expenses)** | **$ 86,752** | **$ (128,416)** | **$ (106,960)** | **$ (85,052)** | **$ (104,765)** |

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties among other factors may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

<2 The consolidated FCRPS Statement reduces reported Revenues and Expenses where between business line transactions occur, the most significant of which are for Transmission Acquisition and Ancillary Services.

<3 The Residential Exchange Program expenses reflect the Scheduled Amount of REP benefits payments established in the 2012 REP Settlement Agreement. The Scheduled Amount of REP benefit payments incorporates a $76,537,617 reduction in REP benefits to provide Refund Amount payments to COUs. The Refund Amount returned to the COUs is reflected through a reduction in the Gross Sales amount.

| Report ID: 0060FY13 | **Power Services Detailed Statement of Revenues and Expenses** | Run Date\Time: October 22, 2013 06:33 |
|---|---|---|
| Requesting BL: POWER BUSINESS UNIT | Through the Month Ended September 30, 2013 | Data Source: EPM Data Warehouse |
| Unit of Measure: $ Thousands | Preliminary/ Unaudited | % of Year Elapsed = 100% |

| | | A | B | C | D <Note 1 | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals | Actuals per Forecast |
| | **Operating Revenues** | | | | | | |
| 1 | **Gross Sales (excluding bookout adjustment)** <Note 2 | $ 2,450,595 | $ 2,501,672 | $ 2,407,477 | $ 2,457,974 | $ 2,438,468 | 99% |
| 2 | **Bookout Adjustment to Sales** | (61,972) | - | - | (58,870) | (66,587) | 113% |
| 3 | **Miscellaneous Revenues** | 26,412 | 26,335 | 27,181 | 26,544 | 28,013 | 106% |
| 4 | **Inter-Business Unit** | 134,716 | 131,078 | 138,442 | 140,828 | 143,689 | 102% |
| 5 | **U.S. Treasury Credits** | 81,583 | 100,447 | 85,999 | 92,777 | 88,692 | 96% |
| 6 | **Total Operating Revenues** | **2,631,334** | **2,759,531** | **2,659,099** | **2,659,253** | **2,632,274** | **99%** |
| | **Operating Expenses** | | | | | | |
| | **Power System Generation Resources** | | | | | | |
| | **Operating Generation** | | | | | | |
| 7 | COLUMBIA GENERATING STATION | 292,636 | 345,945 | 338,267 | 330,147 | 330,066 | 100% |
| 8 | BUREAU OF RECLAMATION | 89,005 | 119,891 | 132,391 | 128,691 | 127,116 | 99% |
| 9 | CORPS OF ENGINEERS | 206,967 | 215,700 | 215,700 | 215,700 | 208,096 | 96% |
| 10 | LONG-TERM CONTRACT GENERATING PROJECTS | 25,869 | 25,831 | 26,008 | 23,490 | 22,518 | 96% |
| 11 | **Sub-Total** | 614,477 | 707,367 | 712,366 | 698,028 | 687,796 | 99% |
| | **Operating Generation Settlements and Other Payments** | | | | | | |
| 12 | COLVILLE GENERATION SETTLEMENT | 20,437 | 22,148 | 20,785 | 22,121 | 22,122 | 100% |
| 13 | **Sub-Total** | 20,437 | 22,148 | 20,785 | 22,121 | 22,122 | 100% |
| | **Non-Operating Generation** | | | | | | |
| 14 | TROJAN DECOMMISSIONING | 1,611 | 1,500 | 1,600 | (23,000) | (26,485) | 115% |
| 15 | WNP-1&4 O&M | 542 | 448 | 716 | 600 | 607 | 101% |
| 16 | **Sub-Total** | 2,153 | 1,948 | 2,316 | (22,400) | (25,878) | 116% |
| | **Gross Contracted Power Purchases** (excluding bookout adjustments) | | | | | | |
| 17 | PNCA HEADWATER BENEFITS | 2,935 | 2,704 | 2,704 | 2,900 | 3,404 | 117% |
| 18 | PURCHASES FOR SERVICE AT TIER 2 RATES | 8,456 | 23,419 | 23,419 | 23,419 | 23,382 | 100% |
| 19 | OTHER POWER PURCHASES - (e.g. Short-Term) | 194,065 | 72,632 | 93,241 | 165,655 | 193,279 | 117% |
| 20 | **Sub-Total** | 205,456 | 98,755 | 119,364 | 191,973 | 220,987 | 115% |
| 21 | **Bookout Adjustments to Contracted Power Purchases** | (61,972) | - | - | (58,870) | (66,587) | 113% |
| | **Augmentation Power Purchases** | | | | | | |
| 22 | AUGMENTATION POWER PURCHASES | (107) | 66,150 | - | - | - | 0% |
| 23 | **Sub-Total** | (107) | 66,150 | - | - | - | 0% |
| | **Exchanges & Settlements** | | | | | | |
| 24 | RESIDENTIAL EXCHANGE PROGRAM <Note 2 | 203,712 | 201,760 | 203,200 | 202,689 | 201,933 | 100% |
| 25 | **Sub-Total** | 203,712 | 201,760 | 203,200 | 202,689 | 201,933 | 100% |
| | **Renewable Generation** | | | | | | |
| 26 | RENEWABLE CONSERVATION RATE CREDIT | (18) | - | - | - | - | 0% |
| 27 | RENEWABLES | 34,036 | 38,142 | 38,140 | 36,140 | 30,463 | 84% |
| 28 | **Sub-Total** | $ 34,018 | $ 38,142 | $ 38,140 | $ 36,140 | $ 30,463 | 84% |

| Report ID: 0060FY13 | Power Services Detailed Statement of Revenues and Expenses | Run Date\Time: October 22, 2013 06:33 |
|---|---|---|
| Requesting BL: POWER BUSINESS UNIT | Through the Month Ended September 30, 2013 | Data Source: EPM Data Warehouse |
| Unit of Measure: $ Thousands | Preliminary/ Unaudited | % of Year Elapsed = 100% |

| | | A | B | C | D <Note 1 | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals | Actuals per Forecast |
| | **Generation Conservation** | | | | | | |
| 29 | DSM TECHNOLOGY | $ 8 | $ - | $ - | $ - | $ 1 | 0% |
| 30 | CONSERVATION ACQUISITION | 12,664 | 15,950 | 15,950 | 13,436 | 10,394 | 77% |
| 31 | LOW INCOME ENERGY EFFICIENCY | 7,274 | 5,000 | 5,000 | 5,080 | 5,025 | 99% |
| 32 | REIMBURSABLE ENERGY EFFICIENCY DEVELOPMENT | 2,435 | 11,500 | 11,500 | 7,200 | 5,368 | 75% |
| 33 | LEGACY | 1,002 | 900 | 900 | 800 | 773 | 97% |
| 34 | MARKET TRANSFORMATION | 14,138 | 14,500 | 14,500 | 14,880 | 14,517 | 98% |
| 35 | CONSERVATION RATE CREDIT (CRC) | (17) | - | - | - | - | 0% |
| 36 | **Sub-Total** | 37,505 | 47,850 | 47,850 | 41,396 | 36,078 | 87% |
| **37** | **Power System Generation Sub-Total** | **1,055,679** | **1,184,120** | **1,144,021** | **1,111,077** | **1,106,913** | **100%** |
| | **Power Non-Generation Operations** | | | | | | |
| | **Power Services System Operations** | | | | | | |
| 38 | INFORMATION TECHNOLOGY | 6,058 | 7,316 | 7,502 | 7,182 | 5,881 | 82% |
| 39 | GENERATION PROJECT COORDINATION | 6,541 | 6,224 | 6,887 | 6,622 | 7,423 | 112% |
| 40 | SLICE IMPLEMENTATION | 1,113 | 2,394 | 1,099 | 999 | 854 | 86% |
| 41 | **Sub-Total** | 13,711 | 15,934 | 15,488 | 14,803 | 14,158 | 96% |
| | **Power Services Scheduling** | | | | | | |
| 42 | OPERATIONS SCHEDULING | 9,071 | 10,010 | 10,312 | 10,312 | 8,426 | 82% |
| 43 | OPERATIONS PLANNING | 6,720 | 6,709 | 7,255 | 6,937 | 6,444 | 93% |
| 44 | **Sub-Total** | 15,791 | 16,719 | 17,567 | 17,249 | 14,871 | 86% |
| | **Power Services Marketing and Business Support** | | | | | | |
| 45 | POWER R&D | 5,556 | 5,939 | 5,940 | 5,925 | 6,186 | 104% |
| 46 | SALES & SUPPORT | 18,566 | 20,130 | 19,539 | 17,948 | 18,822 | 105% |
| 47 | STRATEGY, FINANCE & RISK MGMT | 14,107 | 18,289 | 17,612 | 15,958 | 13,559 | 85% |
| 48 | EXECUTIVE AND ADMINISTRATIVE SERVICES | 3,772 | 3,636 | 4,163 | 3,981 | 3,804 | 96% |
| 49 | CONSERVATION SUPPORT | 8,416 | 9,608 | 9,272 | 8,258 | 7,902 | 96% |
| 50 | **Sub-Total** | 50,417 | 57,602 | 56,527 | 52,069 | 50,273 | 97% |
| **51** | **Power Non-Generation Operations Sub-Total** | **79,919** | **90,255** | **89,582** | **84,121** | **79,302** | **94%** |
| | **Power Services Transmission Acquisition and Ancillary Services** | | | | | | |
| | **PBL Transmission Acquisition and Ancillary Services** | | | | | | |
| 52 | POWER SERVICES TRANSMISSION & ANCILLARY SERVICES | 115,493 | 89,031 | 90,345 | 96,345 | 99,295 | 103% |
| 53 | 3RD PARTY GTA WHEELING | 48,721 | 52,891 | 52,891 | 52,891 | 51,244 | 97% |
| 54 | POWER SERVICES - 3RD PARTY TRANS & ANCILLARY SVCS | 2,553 | 2,244 | 2,244 | 2,244 | 1,869 | 83% |
| 55 | GENERATION INTEGRATION / WIT-TS | 9,101 | 12,968 | 12,968 | 12,968 | 9,941 | 77% |
| 56 | TELEMETERING/EQUIP REPLACEMT | 5 | 51 | 51 | 51 | 1 | 2% |
| **57** | **Power Srvcs Trans Acquisition and Ancillary Services Sub-Tota** | **175,873** | **157,185** | **158,498** | **164,499** | **162,351** | **99%** |
| | **Fish and Wildlife/USF&W/Planning Council/Environmental Req** | | | | | | |
| | **BPA Fish and Wildlife** | | | | | | |
| 58 | **Fish & Wildlife** | 248,957 | 241,384 | 242,922 | 242,959 | 238,984 | 98% |
| 59 | **USF&W Lower Snake Hatcheries** | 22,000 | 29,900 | 29,880 | 28,880 | 28,700 | 99% |
| 60 | **Planning Council** | 9,240 | 10,355 | 10,355 | 10,355 | 10,118 | 98% |
| **61** | **Fish and Wildlife/USF&W/Planning Council Sub-Total** | **$ 280,197** | **$ 281,639** | **$ 283,157** | **$ 282,194** | **$ 277,802** | **98%** |

| Report ID: 0060FY13 | Power Services Detailed Statement of Revenues and Expenses | Run Date\Time: October 22, 2013 06:33 |
|---|---|---|
| Requesting BL: POWER BUSINESS UNIT | Through the Month Ended September 30, 2013 | Data Source: EPM Data Warehouse |
| Unit of Measure: $ Thousands | Preliminary/ Unaudited | % of Year Elapsed = 100% |

| | | A | B | C | D <Note 1 | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals | Actuals per Forecast |
| | **BPA Internal Support** | | | | | | |
| 62 | **Additional Post-Retirement Contribution** | $ 17,243 | $ 17,821 | $ 17,243 | $ 17,821 | $ 17,820 | 100% |
| 63 | **Agency Services G&A (excludes direct project support)** | 52,789 | 52,662 | 52,586 | 53,949 | 52,108 | 97% |
| 64 | **BPA Internal Support Sub-Total** | **70,032** | **70,483** | **69,829** | **71,770** | **69,928** | **97%** |
| 65 | **Bad Debt Expense** | **1,757** | **-** | **-** | **3** | **12** | **342%** |
| 66 | **Other Income, Expenses, Adjustments** | **(1,650)** | **-** | **-** | **698** | **(139)** | **-120%** |
| | **Non-Federal Debt Service** | | | | | | |
| | **Energy Northwest Debt Service** | | | | | | |
| 67 | COLUMBIA GENERATING STATION DEBT SVC | 101,519 | 100,172 | 92,203 | 96,880 | 96,935 | 100% |
| 68 | WNP-1 DEBT SVC | 284,923 | 249,288 | 237,437 | 234,800 | 234,847 | 100% |
| 69 | WNP-3 DEBT SVC | 158,713 | 175,817 | 174,617 | 170,691 | 170,737 | 100% |
| 70 | **Sub-Total** | 545,155 | 525,277 | 504,257 | 502,371 | 502,518 | 100% |
| | **Non-Energy Northwest Debt Service** | | | | | | |
| 71 | CONSERVATION DEBT SVC | 2,687 | 2,377 | 2,610 | 2,610 | 2,617 | 100% |
| 72 | COWLITZ FALLS DEBT SVC | 11,715 | 11,709 | 11,709 | 11,595 | 11,474 | 99% |
| 73 | NORTHERN WASCO DEBT SVC | 1,751 | 2,224 | 1,927 | 1,927 | 1,926 | 100% |
| 74 | **Sub-Total** | 16,153 | 16,309 | 16,247 | 16,133 | 16,018 | 99% |
| 75 | **Non-Federal Debt Service Sub-Total** | **561,308** | **541,586** | **520,504** | **518,504** | **518,536** | **100%** |
| 76 | **Depreciation** | **111,724** | **127,560** | **119,100** | **126,500** | **130,353** | **103%** |
| 77 | **Amortization** | **87,562** | **86,767** | **92,303** | **92,478** | **92,819** | **100%** |
| 78 | **Total Operating Expenses** | **2,422,400** | **2,539,594** | **2,476,994** | **2,451,844** | **2,437,878** | **99%** |
| 79 | **Net Operating Revenues (Expenses)** | **208,934** | **219,937** | **182,105** | **207,409** | **194,397** | **94%** |
| | **Interest Expense and (Income)** | | | | | | |
| 80 | **Federal Appropriation** | 205,652 | 222,714 | 216,977 | 218,106 | 218,164 | 100% |
| 81 | **Capitalization Adjustment** | (45,937) | (45,937) | (45,937) | (45,937) | (45,937) | 100% |
| 82 | **Borrowings from US Treasury** | 49,169 | 75,015 | 53,390 | 55,916 | 55,698 | 100% |
| 83 | **Customer Prepaid Power Purchases** | - | - | - | 7,653 | 7,653 | 100% |
| 84 | **AFUDC** | (8,835) | (13,592) | (13,410) | (11,235) | (10,674) | 95% |
| 85 | **Interest Income** | (30,301) | (16,756) | (11,500) | (16,617) | (15,444) | 93% |
| 86 | **Net Interest Expense (Income)** | **169,748** | **221,444** | **199,520** | **207,886** | **209,460** | **101%** |
| 87 | **Total Expenses** | **2,592,149** | **2,761,038** | **2,676,514** | **2,659,730** | **2,647,338** | **100%** |
| 88 | **Net Revenues (Expenses)** | **$ 39,185** | **$ (1,507)** | **$ (17,415)** | **$ (476)** | **$ (15,064)** | **3163%** |

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties among other factors may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

<2 The Residential Exchange Program expenses reflect the Scheduled Amount of REP benefits payments established in the 2012 REP Settlement Agreement. The Scheduled Amount of REP benefit payments incorporates a $76,537,617 reduction in REP benefits to provide Refund Amount payments to COUs. The Refund Amount returned to the COUs is reflected through a reduction in the Gross Sales amount.

Report ID: 0061FY13 | **Transmission Services Detailed Statement of Revenues and Expenses** | Run Date/Time: October 22, 2013 06:34
Requesting BL: TRANSMISSION BUSINESS UNIT | Through the Month Ended September 30, 2013 | Data Source: EPM Data Warehouse
Unit of Measure: $ Thousands | Preliminary/ Unaudited | % of Year Elapsed = 100%

| | | A | B | C | D <Note 1 | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals | Actuals per Forecast |
| | **Operating Revenues** | | | | | | |
| | **Sales** | | | | | | |
| | **Network** | | | | | | |
| 1 | **Network Integration** | $ 122,765 | $ 132,022 | $ 126,030 | $ 120,360 | $ 122,700 | 102% |
| 2 | **Other Network** | 376,535 | 410,898 | 390,992 | 380,701 | 379,306 | 100% |
| 3 | **Intertie** | 77,120 | 78,299 | 79,223 | 80,333 | 78,774 | 98% |
| 4 | **Other Direct Sales** | 214,548 | 223,112 | 225,393 | 223,069 | 222,910 | 100% |
| 5 | **Miscellaneous Revenues** | 30,263 | 31,802 | 38,615 | 50,348 | 54,007 | 107% |
| 6 | **Inter-Business Unit Revenues** | 143,909 | 93,888 | 103,067 | 109,110 | 122,177 | 112% |
| 7 | **Total Operating Revenues** | **965,141** | **970,021** | **963,319** | **963,922** | **979,873** | **102%** |
| | **Operating Expenses** | | | | | | |
| | **Transmission Operations** | | | | | | |
| | **System Operations** | | | | | | |
| 8 | INFORMATION TECHNOLOGY | 9,098 | 7,529 | 7,449 | 7,508 | 9,115 | 121% |
| 9 | POWER SYSTEM DISPATCHING | 12,089 | 12,748 | 13,486 | 12,486 | 12,155 | 97% |
| 10 | CONTROL CENTER SUPPORT | 13,646 | 14,498 | 14,583 | 14,585 | 14,062 | 96% |
| 11 | TECHNICAL OPERATIONS | 3,816 | 8,623 | 5,029 | 4,396 | 4,410 | 100% |
| 12 | SUBSTATION OPERATIONS | 21,947 | 21,735 | 21,634 | 21,569 | 21,750 | 101% |
| 13 | **Sub-Total** | 60,595 | 65,133 | 62,181 | 60,544 | 61,490 | 102% |
| | **Scheduling** | | | | | | |
| 14 | RESERVATIONS | 4,064 | 1,109 | 5,466 | 4,667 | 4,160 | 89% |
| 15 | PRE-SCHEDULING | 216 | 486 | 245 | 245 | 240 | 98% |
| 16 | REAL-TIME SCHEDULING | 3,758 | 5,185 | 4,757 | 3,601 | 3,879 | 108% |
| 17 | SCHEDULING TECHNICAL SUPPORT | 948 | 5,749 | 402 | 451 | 432 | 96% |
| 18 | SCHEDULING AFTER-THE-FACT | 236 | 462 | 257 | 257 | 236 | 92% |
| 19 | **Sub-Total** | 9,222 | 12,991 | 11,129 | 9,222 | 8,948 | 97% |
| | **Marketing and Business Support** | | | | | | |
| 20 | TRANSMISSION SALES | 2,787 | 3,362 | 3,089 | 2,848 | 2,509 | 88% |
| 21 | MKTG TRANSMISSION FINANCE | 286 | 310 | - | (6) | (6) | 93% |
| 22 | MKTG CONTRACT MANAGEMENT | 4,442 | 4,572 | 4,699 | 4,306 | 4,498 | 104% |
| 23 | MKTG TRANSMISSION BILLING | 2,229 | 2,382 | 2,790 | 2,636 | 2,528 | 96% |
| 24 | MKTG BUSINESS STRAT & ASSESS | 6,603 | 6,670 | 6,593 | 6,613 | 6,552 | 99% |
| 25 | **Marketing Sub-Total** | 16,345 | 17,296 | 17,171 | 16,396 | 16,081 | 98% |
| 26 | EXECUTIVE AND ADMIN SERVICES | 12,204 | 13,764 | 13,330 | 11,734 | 10,364 | 88% |
| 27 | LEGAL SUPPORT | 3,034 | 3,227 | 4,057 | 2,989 | 2,240 | 75% |
| 28 | TRANS SERVICES INTERNAL GENERAL & ADMINISTRATIVE | 13,995 | 11,949 | 14,456 | 13,833 | 9,199 | 66% |
| 29 | AIRCRAFT SERVICES | 1,082 | 2,438 | 2,287 | 1,808 | 1,205 | 67% |
| 30 | LOGISTICS SERVICES | 4,839 | 5,792 | 5,636 | 5,540 | 4,710 | 85% |
| 31 | SECURITY ENHANCEMENTS | 475 | 1,001 | 1,001 | 951 | 705 | 74% |
| 32 | **Business Support Sub-Total** | 35,630 | 38,170 | 40,767 | 36,854 | 28,423 | 77% |
| 33 | **Transmission Operations Sub-Total** | **$ 121,792** | **$ 133,590** | **$ 131,248** | **$ 123,016** | **$ 114,942** | **93%** |

Report ID: 0061FY13 | **Transmission Services Detailed Statement of Revenues and Expenses** | Run Date/Time: October 22, 2013 06:34
Requesting BL: TRANSMISSION BUSINESS UNIT | Through the Month Ended September 30, 2013 | Data Source: EPM Data Warehouse
Unit of Measure: $ Thousands | Preliminary/ Unaudited | % of Year Elapsed = 100%

| | | A | B | C | D <Note 1 | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals | Actuals per Forecast |
| | **Transmission Maintenance** | | | | | | |
| | **System Maintenance** | | | | | | |
| 34 | NON-ELECTRIC MAINTENANCE | $ 25,900 | $ 27,033 | $ 26,917 | $ 26,888 | $ 25,204 | 94% |
| 35 | SUBSTATION MAINTENANCE | 28,056 | 30,825 | 30,791 | 28,810 | 27,726 | 96% |
| 36 | TRANSMISSION LINE MAINTENANCE | 24,984 | 26,664 | 26,198 | 23,396 | 26,572 | 114% |
| 37 | SYSTEM PROTECTION CONTROL MAINTENANCE | 11,651 | 13,215 | 12,852 | 12,850 | 11,869 | 92% |
| 38 | POWER SYSTEM CONTROL MAINTENANCE | 12,637 | 13,850 | 16,326 | 17,099 | 17,623 | 103% |
| 39 | JOINT COST MAINTENANCE | 146 | 212 | 212 | 217 | 123 | 57% |
| 40 | SYSTEM MAINTENANCE MANAGEMENT | 4,879 | 6,516 | 7,544 | 7,072 | 7,076 | 100% |
| 41 | ROW MAINTENANCE | 5,243 | 25,256 | 8,438 | 8,747 | 7,298 | 83% |
| 42 | HEAVY MOBILE EQUIP MAINT | | (19) | - | - | (125) | 0% |
| 43 | TECHNICAL TRAINING | 2,443 | 2,991 | 2,888 | 2,888 | 2,211 | 77% |
| 44 | VEGETATION MANAGEMENT | 16,141 | - | 16,818 | 16,513 | 17,928 | 109% |
| 45 | **Sub-Total** | 132,079 | 146,545 | 148,984 | 144,481 | 143,506 | 99% |
| | **Environmental Operations** | | | | | | |
| 46 | ENVIRONMENTAL ANALYSIS | 10 | 82 | 82 | 82 | | 0% |
| 47 | POLLUTION PREVENTION AND ABATEMENT | 3,288 | 4,204 | 4,212 | 4,245 | 3,427 | 81% |
| 48 | **Sub-Total** | 3,298 | 4,286 | 4,294 | 4,327 | 3,427 | 79% |
| **49** | **Transmission Maintenance Sub-Total** | **135,377** | **150,831** | **153,278** | **148,808** | **146,933** | **99%** |
| | **Transmission Engineering** | | | | | | |
| | **System Development** | | | | | | |
| 50 | RESEARCH & DEVELOPMENT | 6,653 | 8,000 | 7,990 | 7,269 | 6,657 | 92% |
| 51 | TSD PLANNING AND ANALYSIS | 12,734 | 11,895 | 14,699 | 15,948 | 16,060 | 101% |
| 52 | CAPITAL TO EXPENSE TRANSFER | 11,765 | 4,072 | 4,072 | 4,073 | 7,068 | 174% |
| 53 | NERC / WECC COMPLIANCE | 9,916 | 7,008 | 12,936 | 12,135 | 13,056 | 108% |
| 54 | ENVIRONMENTAL POLICY/PLANNING | 1,188 | 1,828 | 1,776 | 1,885 | 1,241 | 66% |
| 55 | ENG RATING AND COMPLIANCE | 3,855 | - | 382 | 1,182 | 1,794 | 152% |
| 56 | **Sub-Total** | 46,111 | 32,803 | 41,855 | 42,493 | 45,876 | 108% |
| **57** | **Transmission Engineering Sub-Total** | **46,111** | **32,803** | **41,855** | **42,493** | **45,876** | **108%** |
| | **Trans. Services Transmission Acquisition and Ancillary Services** | | | | | | |
| | **BBL Acquisition and Ancillary Products and Services** | | | | | | |
| 58 | ANCILLARY SERVICES PAYMENTS | 121,528 | 117,777 | 125,731 | 128,156 | 131,064 | 102% |
| 59 | OTHER PAYMENTS TO POWER SERVICES | 9,536 | 9,362 | 9,363 | 9,364 | 9,364 | 100% |
| 60 | STATION SERVICES PAYMENTS | 3,652 | 3,350 | 3,350 | 3,337 | 3,264 | 98% |
| 61 | **Sub-Total** | 134,716 | 130,489 | 138,444 | 140,857 | 143,692 | 102% |
| | **Non-BBL Acquisition and Ancillary Products and Services** | | | | | | |
| 62 | LEASED FACILITIES | 4,419 | 4,224 | 4,200 | 3,800 | 3,968 | 104% |
| 63 | GENERAL TRANSFER AGREEMENTS (SETTLEMENT) | 12,724 | 509 | 500 | 3,030 | 5,569 | 184% |
| 64 | NON-BBL ANCILLARY SERVICES | 395 | 6,857 | 4,120 | 3,922 | 3,417 | 87% |
| 65 | TRANSMISSION RENEWABLES | 555 | - | 561 | 587 | 162 | 28% |
| 66 | **Sub-Total** | 18,093 | 11,590 | 9,381 | 11,339 | 13,116 | 116% |
| **67** | **Trans. Srvcs. Acquisition and Ancillary Services Sub-Total** | **152,809** | **142,079** | **147,825** | **152,195** | **156,807** | **103%** |
| | **Transmission Reimbursables** | | | | | | |
| | **Reimbursables** | | | | | | |
| 68 | EXTERNAL REIMBURSABLE SERVICES | 24,913 | 7,580 | 6,927 | 8,862 | 24,835 | 280% |
| 69 | INTERNAL REIMBURSABLE SERVICES | 1,809 | 2,334 | 2,756 | 2,863 | 2,390 | 83% |
| 70 | **Sub-Total** | 26,722 | 9,914 | 9,682 | 11,725 | 27,225 | 232% |
| **71** | **Transmission Reimbursables Sub-Total** | **$ 26,722** | **$ 9,914** | **$ 9,682** | **$ 11,725** | **$ 27,225** | **232%** |

Report ID: 0061FY13 | **Transmission Services Detailed Statement of Revenues and Expenses** | Run Date/Time: October 22, 2013 06:34
Requesting BL: TRANSMISSION BUSINESS UNIT | Through the Month Ended September 30, 2013 | Data Source: EPM Data Warehouse
Unit of Measure: $ Thousands | Preliminary/ Unaudited | % of Year Elapsed = 100%

| | | A | B | C | D <Note 1 | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2012 | FY 2013 | | | FY 2013 | FY 2013 |
| | | Actuals | Rate Case | SOY Budget | Current EOY Forecast | Actuals | Actuals per Forecast |
| | **BPA Internal Support** | | | | | | |
| 72 | Additional Post-Retirement Contribution | $ 17,243 | $ 17,821 | $ 17,821 | $ 17,821 | $ 17,820 | 100% |
| 73 | Agency Services G & A (excludes direct project support) | 57,065 | 60,961 | 58,357 | 59,802 | 59,868 | 100% |
| 74 | **BPA Internal Support Subtotal** | 74,308 | 78,781 | 76,177 | 77,623 | 77,689 | 100% |
| | **Other Income, Expenses, and Adjustments** | | | | | | |
| 75 | Bad Debt Expense | (27) | - | - | 19 | 44 | 231% |
| 76 | Other Income, Expenses, Adjustments | (253) | - | - | 599 | (1,673) | -379% |
| 77 | Undistributed Reduction | - | - | (2,297) | - | - | 0% |
| 78 | **Depreciation** | 188,681 | 216,397 | 195,220 | 200,960 | 204,848 | 102% |
| 79 | **Amortization** | 1,130 | 1,727 | 1,760 | 1,720 | 1,697 | 99% |
| 80 | **Total Operating Expenses** | 746,650 | 766,122 | 754,748 | 759,159 | 774,388 | 102% |
| 81 | **Net Operating Revenues (Expenses)** | 218,491 | 203,899 | 208,572 | 204,763 | 205,486 | 100% |
| | **Interest Expense and (Income)** | | | | | | |
| 82 | Federal Appropriation | 26,712 | 10,396 | 18,600 | 18,641 | 18,641 | 100% |
| 83 | Capitalization Adjustment | (18,968) | (18,968) | (18,968) | (18,968) | (18,968) | 100% |
| 84 | Borrowings from US Treasury | 76,499 | 137,582 | 79,730 | 82,831 | 81,801 | 99% |
| 85 | Debt Service Reassignment | 57,233 | 52,556 | 51,498 | 53,671 | 53,671 | 100% |
| 86 | Customer Advances | 10,709 | 25,188 | 10,500 | 8,375 | 7,962 | 95% |
| 87 | Lease Financing | 27,898 | 22,133 | 48,996 | 30,566 | 31,323 | 102% |
| 88 | AFUDC | (37,010) | (32,255) | (33,400) | (31,400) | (26,855) | 86% |
| 89 | Interest Income | (13,293) | (21,467) | (17,260) | (14,067) | (13,493) | 96% |
| 90 | **Net Interest Expense (Income)** | 129,781 | 175,165 | 139,697 | 129,649 | 134,082 | 103% |
| 91 | **Total Expenses** | 876,431 | 941,287 | 894,444 | 888,808 | 908,469 | 102% |
| 92 | **Net Revenues (Expenses)** | $ 88,710 | $ 28,734 | $ 68,875 | $ 75,114 | $ 71,404 | 95% |

<1 Although the forecasts in this report are presented as point estimates, BPA operates a hydro-based system that encounters much uncertainty regarding water supply and wholesale market prices. These uncertainties, among other factors, may result in large range swings +/- impacting the final results in revenues, expenses, and cash reserves.

Report ID: 0067FY13
Requesting BL: CORPORATE BUSINESS UNIT
Unit of Measure: $Thousands

## BPA Statement of Capital Expenditures

FYTD Through the Month Ended September 30, 2013
Preliminary Unaudited

Run Date/Run Time: October 22, 2013/ 08:36
Data Source: EPM Data Warehouse
% of Year Elapsed = 100%

| | | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2013 | | FY 2013 | | FY 2013 | |
| | | SOY Budget | Current EOY Forecast | Actuals: Sep | Actuals: FYTD | Actuals / SOY Budget | Actuals / Forecast |
| | **Transmission Business Unit** | | | | | | |
| | MAIN GRID | | | | | | |
| 1 | MID-COLUMBIA REINFORCEMENT | $ - | $ 61 | $ - | $ 260 | 0% | 428% |
| 2 | CENTRAL OREGON REINFORCEMENT | 6,699 | 6,247 | (16) | 6,226 | 93% | 100% |
| 3 | BIG EDDY-KNIGHT 500kv PROJECT | 48,316 | 35,761 | 2,213 | 38,012 | 79% | 106% |
| 4 | OLYMPIC PENINSULA REINFORCEMNT | 1,639 | 688 | 122 | 1,031 | 63% | 150% |
| 5 | WEST OF MCNARY INTEGRATION PRO | 68 | 2,853 | (1) | 2,366 | 3480% | 83% |
| 6 | I-5 CORRIDOR UPGRADE PROJECT | 15,171 | 10,889 | 1,578 | 11,195 | 74% | 103% |
| 7 | CENTRAL FERRY- LOWER MONUMNTAL | 46,366 | 1,475 | 143 | 1,537 | 3% | 104% |
| 8 | SEATTLE-PUDGET SOUND AREA | 8,049 | 1,125 | 174 | 619 | 8% | 55% |
| 9 | PORTLAND-VANCOUVER | 2,222 | 6,191 | 427 | 6,225 | 280% | 101% |
| 10 | WEST OF CASCADES NORTH | 1,523 | 403 | 54 | 866 | 57% | 215% |
| 11 | NORTHERN INTERTIE | 250 | 57 | 2 | 41 | 16% | 71% |
| 12 | SALEM- ALBANY-EUGENE AREA | 275 | 448 | 24 | 325 | 118% | 72% |
| 13 | TRI-CITIES AREA | 7,197 | 7,586 | 1,827 | 6,896 | 96% | 91% |
| 14 | MONTANA-WEST OF HATWAI | 7,699 | 464 | 36 | 232 | 3% | 50% |
| 15 | NERC CRITERIA COMPLIANCE | 6,612 | - | - | - | 0% | 0% |
| 16 | MISC. MAIN GRID PROJECTS | 8,303 | 9,843 | 4,455 | 11,177 | 135% | 114% |
| 17 | TOTAL MAIN GRID | 160,391 | 84,090 | 11,039 | 87,006 | 54% | 103% |
| | AREA & CUSTOMER SERVICE | | | | | | |
| 18 | ROGUE SVC ADDITION | 1,393 | 209 | 53 | 726 | 52% | 347% |
| 19 | CITY OF CENTRALIA PROJECT | - | 42 | 1 | 8 | 0% | 18% |
| 20 | SOUTHERN IDAHO - LOWER VALLEY | 14,425 | 4,988 | 672 | 4,730 | 33% | 95% |
| 21 | LONGVIEW AREA REINFORCEMENT | 355 | 255 | 83 | 405 | 114% | 159% |
| 22 | KALISPELL-FLATHEAD VALLEY | 2,338 | 3,767 | 1,587 | 4,472 | 191% | 119% |
| 23 | MISC. AREA & CUSTOMER SERVICE | 4,592 | 3,381 | 799 | 3,450 | 75% | 102% |
| 24 | TOTAL AREA & CUSTOMER SERVICE | $ 23,103 | $ 12,641 | $ 3,195 | $ 13,791 | 60% | 109% |

Report ID: 0067FY13
Requesting BL: CORPORATE BUSINESS UNIT
Unit of Measure: $Thousands

## BPA Statement of Capital Expenditures

FYTD Through the Month Ended September 30, 2013
Preliminary Unaudited

Run Date/Run Time: October 22, 2013/ 08:36
Data Source: EPM Data Warehouse
% of Year Elapsed = 100%

| | | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2013 | | FY 2013 | | FY 2013 | |
| | | SOY Budget | Current EOY Forecast | Actuals: Sep | Actuals: FYTD | Actuals / SOY Budget | Actuals / Forecast |
| | **Transmission Business Unit (Continued)** | | | | | | |
| | SYSTEM REPLACEMENTS | | | | | | |
| 25 | TEAP - TOOLS | $ 2,000 | $ 1,226 | $ 837 | $ 1,408 | 70% | 115% |
| 26 | TEAP - EQUIPMENT | 8,456 | 6,807 | 947 | 4,500 | 53% | 66% |
| 27 | SPC - SER | 5,508 | 8,246 | (30) | 4,398 | 80% | 53% |
| 28 | SPC - DFRS | 200 | 876 | 27 | 969 | 484% | 111% |
| 29 | SPC - METERING | 596 | 765 | 188 | 732 | 123% | 96% |
| 30 | SPC - CONTROL AND INDICATION | 1,724 | 1,958 | 95 | 2,513 | 146% | 128% |
| 31 | SPC - RELAYS | 24,838 | 11,154 | 1,407 | 9,477 | 38% | 85% |
| 32 | PSC - TELEPHONE SYSTEMS | 306 | 299 | 47 | 284 | 93% | 95% |
| 33 | PSC - TRANSFER TRIP | 12,346 | 7,490 | 1,491 | 6,754 | 55% | 90% |
| 34 | PSC - FIN/OP NETWORKS | 95 | 340 | 78 | 491 | 517% | 144% |
| 35 | PSC - TLECOM TRANSPORT | 1,179 | 850 | 235 | 1,214 | 103% | 143% |
| 36 | PSC - SCADA/TELEMTRY/SUP CNTRL | 1,269 | 1,235 | 61 | 1,409 | 111% | 114% |
| 37 | PSC- TELECOM SUPPORT EQUIPMENT | 1,469 | 4,855 | 485 | 3,028 | 206% | 62% |
| 38 | SUB DC- PWR ELCTRNC & SRS CAPS | 13,436 | 18,160 | 2,072 | 15,190 | 113% | 84% |
| 39 | SUB AC- BUS & STRUCTURES | 610 | 882 | 21 | 1,075 | 176% | 122% |
| 40 | SUB AC - LOW VOLTAGE AUX. | 5,055 | 7,356 | 976 | 5,513 | 109% | 75% |
| 41 | SUB AC- SHUNT CAPACITORS | 50 | 2,022 | 47 | 1,703 | 3407% | 84% |
| 42 | SUB AC-CIRCUIT BRKR & SWTCH GR | 20,272 | 19,600 | 5,558 | 19,529 | 96% | 100% |
| 43 | SUB AC - CVT/PT/CT & ARRESTERS | 1,244 | 3,611 | 137 | 3,394 | 273% | 94% |
| 44 | SUB AC-TRANSFORMERS & REACTORS | 9,813 | 10,616 | 6,172 | 7,310 | 74% | 69% |
| 45 | LINES - STEEL HARDWARE REPLCMT | 32,898 | 28,600 | 2,190 | 26,025 | 79% | 91% |
| 46 | LINES - WOOD POLE LN REBUILDS | 50,727 | 49,081 | 2,649 | 46,330 | 91% | 94% |
| 47 | MISC. REPLACEMENT PROJECTS | - | 689 | 4,301 | 9,617 | 0% | 1396% |
| 48 | MISC FACILITIES- NON-ELECTRIC | 33,447 | 28,090 | 7,449 | 17,431 | 52% | 62% |
| 49 | TOTAL SYSTEM REPLACEMENTS | $ 227,542 | $ 214,807 | $ 37,441 | $ 190,294 | 84% | 89% |

Report ID: 0067FY13
Requesting BL: CORPORATE BUSINESS UNIT
Unit of Measure: $Thousands

**BPA Statement of Capital Expenditures**
FYTD Through the Month Ended September 30, 2013
Preliminary Unaudited

Run Date/Run Time: October 22, 2013/ 08:36
Data Source: EPM Data Warehouse
% of Year Elapsed = 100%

| | | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2013 | | FY 2013 | | FY 2013 | |
| | | SOY Budget | Current EOY Forecast | Actuals: Sep | Actuals: FYTD | Actuals / SOY Budget | Actuals / Forecast |
| | **Transmission Business Unit (Continued)** | | | | | | |
| | UPGRADES & ADDITIONS | | | | | | |
| 50 | IT PROJECTS | $ 2,851 | $ 8,577 | $ 992 | $ 7,381 | 259% | 86% |
| 51 | SECURITY ENHANCEMENTS | 11,001 | 6,131 | 1,237 | 4,350 | 40% | 71% |
| 52 | LAND RIGHTS - ACCESS ROADS | 5,819 | 5,737 | 801 | 6,939 | 119% | 121% |
| 53 | LAND RIGHTS- VEG MITIGATION | 582 | 676 | 2 | 374 | 64% | 55% |
| 54 | LAND RIGHTS - TRIBAL RENEWALS | 1,261 | 933 | 32 | 238 | 19% | 26% |
| 55 | ACCESS ROADS | 18,247 | 15,783 | 3,229 | 17,055 | 93% | 108% |
| 56 | SUBSTATION UPGRADES | 21,208 | 17,989 | 3,019 | 16,075 | 76% | 89% |
| 57 | LINE SWITCH UPGRADES | 300 | - | - | - | 0% | 0% |
| 58 | LINE CAPACITY UPGRADES | 1,000 | 1,365 | 144 | 1,385 | 138% | 101% |
| 59 | CELILO UPGRADES PROJECT | 106,775 | 59,111 | 1,914 | 47,967 | 45% | 81% |
| 60 | CONTROL CENTERS | 2,385 | 312 | 2 | 9 | 0% | 3% |
| 61 | CC SYSTEM & APPLICATION | 4,107 | 1,907 | 688 | 1,977 | 48% | 104% |
| 62 | CC INFASTRUCTURE COMPONENTS | 7,054 | 4,731 | 1,594 | 4,389 | 62% | 93% |
| 63 | SYSTEM TELECOMMUNICATION | 48,010 | 39,178 | 11,429 | 38,883 | 81% | 99% |
| 64 | MISC. UPGRADES AND ADDITIONS | 24,646 | 41,895 | 18,401 | 49,793 | 202% | 119% |
| 65 | TOTAL UPGRADES & ADDITIONS | 255,246 | 204,325 | 43,484 | 196,816 | 77% | 96% |
| | ENVIRONMENT CAPITAL | | | | | | |
| 66 | MISC. ENVIRONMENT PROJECTS | 6,483 | 8,110 | 2,094 | 7,791 | 120% | 96% |
| 67 | TOTAL ENVIRONMENT CAPITAL | 6,483 | 8,110 | 2,094 | 7,791 | 120% | 96% |
| 68 | CAPITAL DIRECT | 672,764 | 523,973 | 97,252 | 495,699 | 74% | 95% |
| | PFIA | | | | | | |
| 69 | MISC. PFIA PROJECTS | 12,520 | 10,616 | 480 | 10,151 | 81% | 96% |
| 70 | GENERATOR INTERCONNECTION | 38,862 | (240) | (8,770) | (2,446) | -6% | 1020% |
| 71 | SPECTRUM RELOCATION | 1,296 | 914 | 109 | 1,044 | 81% | 114% |
| 72 | TOTAL PFIA | 52,678 | 11,291 | (8,181) | 8,749 | 17% | 77% |
| 73 | CAPITAL INDIRECT | () | - | (12,605) | 1,259 | 0% | 0% |
| 74 | LAPSE FACTOR | (72,273) | - | - | - | 0% | 0% |
| 75 | **TOTAL Transmission Business Unit** | $ 653,169 | $ 535,263 | $ 76,466 | $ 505,706 | 77% | 94% |

Report ID: 0067FY13
Requesting BL: CORPORATE BUSINESS UNIT
Unit of Measure: $Thousands

## BPA Statement of Capital Expenditures

FYTD Through the Month Ended September 30, 2013
Preliminary Unaudited

Run Date/Run Time: October 22, 2013/ 08:36
Data Source: EPM Data Warehouse
% of Year Elapsed = 100%

| | | A | B | C | D | E | F |
|---|---|---|---|---|---|---|---|
| | | FY 2013 | | FY 2013 | | FY 2013 | |
| | | SOY Budget | Current EOY Forecast | Actuals: Sep | Actuals: FYTD | Actuals / SOY Budget | Actuals / Forecast |
| | **Power Business Unit** | | | | | | |
| 76 | BUREAU OF RECLAMATION | $ 64,546 | $ 71,179 | $ 2,412 | $ 67,539 | 105% | 95% |
| 77 | CORPS OF ENGINEERS | 172,635 | 144,774 | 20,630 | 138,886 | 80% | 96% |
| 78 | GENERATION CONSERVATION | 82,170 | 81,000 | 21,916 | 78,376 | 95% | 97% |
| 79 | POWER INFORMATION TECHNOLOGY | 5,885 | 7,000 | (133) | 5,881 | 100% | 84% |
| 80 | FISH & WILDLIFE | 67,145 | 60,002 | 17,591 | 52,120 | 78% | 87% |
| 81 | LAPSE FACTOR | (12,417) | - | - | - | 0% | 0% |
| 82 | **TOTAL Power Business Unit** | 379,964 | 363,955 | 62,417 | 342,802 | 90% | 94% |
| | **Corporate Business Unit** | | | | | | |
| 83 | CORPORATE BUSINESS UNIT | 48,649 | 34,274 | 4,358 | 34,577 | 71% | 101% |
| 84 | **TOTAL Corporate Business Unit** | 48,649 | 34,274 | 4,358 | 34,577 | 71% | 101% |
| 85 | **TOTAL BPA Capital Expenditures** | $ 1,081,782 | $ 933,493 | $ 143,241 | $ 883,086 | 82% | 95% |

# Proposed Schedule for Slice True-Up Adjustment for Composite Cost Pool True-Up Table and Cost Verification Process

| Dates | Agenda |
|---|---|
| November 5, 2013 | Fourth Quarter Business Review Meeting with customers<br>Provide Slice True-Up Adjustment for the Composite Cost Pool (this number posted in the financial system) |
| November 18, 2013 | Mail notification to Slice Customers of the Slice True-Up Adjustment for the Composite Cost Pool |
| November 20, 2013 | BPA to post Composite Cost Pool True-Up Table containing actual values and the Slice True-Up Adjustment |
| December 12, 2013 | Deadline for customers to submit questions about actual line items in the Composite Cost Pool True-Up Table with the Slice True-Up Adjustment for inclusion in the Agreed Upon Procedures (AUPs) Performed by BPA external CPA firm (customers have 15 business days following the posting of Composite Cost Pool Table containing actual values and the Slice True-Up Adjustment |
| December 20, 2013 | BPA posts a draft list of AUP tasks to be performed (Attachment A does not specify an exact date) |
| January 7, 2014 | Customer comments are due on the list of tasks (The deadline can not exceed 10 days from BPA posting) |
| January 14, 2014 | BPA finalizes list of questions about actual lines items in the Composite Cost Pool True-Up Table for AUPs |
| January 16, 2014 | External auditor to begin the work on the AUP tasks requested by customers |
| March 17, 2014 | External auditor to complete the AUPs (may have up to 120 calendar days) |
| March 24, 2014 | Initial Cost Verification Workshop |
| April 17, 2014 | Customer comment period deadline |
| April 24, 2014 | Follow-up Cost Verification Workshop |
| May 15, 2014 | BPA Draft Response on AUP Report and questions/items raised during workshops |
| End of May 2014 | If customers do not deliver any notice of grievances, BPA will issue a Final Response on the AUP Report |

# 4h10c Credits: FY 2013

| Estimated 4h10c Credits ($ millions) | FY13 Rate Case | Start Of Year | 1st Quarter | 2nd Quarter | 3rd Quarter | August DOE Certification | Final Calculations |
|---|---|---|---|---|---|---|---|
| Power Purchases Caused by Operations for Fish & Wildlife | $ 137.0 BP-12 Rate Case 70-yr average | $ 53.1 STD03 forecasts Oct-Sep | $ 50.3 Actual Generation Oct-Dec, Study08 forecasts Jan-Sep | $ 76.7 Actual Credits Oct-Dec, Actual Generation Jan-Apr, Study14 forecasts May-Sep | $ 83.5 Actual Credits Oct-Mar, Actual Generation Apr-Jun, Study18 forecasts Jul-Sep | $ 74.8 Actual Credits Oct-Jul, Study22 forecasts Aug-Sep | $ 85.8 Actual Credits Oct-Sep |
| Expense | $ 241.0 | $ 242.9 | $ 242.9 | $ 242.9 | $ 242.9 | $ 243.0 | $ 239.0 |
| F&W Program Software | $ 1.8 | $ 1.8 | $ 1.8 | $ 1.8 | $ 1.8 | $ 0.2 | $ 0.0 |
| Capital | $ 50.0 | $ 67.1 | $ 67.1 | $ 67.1 | $ 67.1 | $ 60.0 | $ 52.1 |
| Total | $ 429.8 | $ 365.0 | $ 362.2 | $ 388.6 | $ 395.4 | $ 377.9 | $ 377.1 |
| **Credit (22.3%)** | **$ 95.8** | **$ 81.4** | **$ 80.8** | **$ 86.6** | **$ 88.2** | **$ 84.3** | **$ 84.1** |

**Comments on the Power Purchase Forecasts:**

- For the Rate Case we estimated a 4(h)(10)(C) credit for each of the 70 historic water years in the Rate Case study and used the average of these estimates. The estimates can vary significantly each year; for instance, the 70 years of 4(h)(10)(C) estimates ranged from $70M to $240M.
- For Start-of-year we estimated power purchases based on ESP forecasts from Study 03, the forecasted actual generation was similar to the average rate case generation, but prices were significantly lower, which caused the forecast to fall below the expected range from the Rate Case.
- For 1st Quarter we forecasted power purchases for Oct-Dec based on actual generation and prices, and we forecasted Jan-Sep based on ESP forecasts from Study 08. The estimate was similar to the start-of-year.
- For 2nd Quarter we have actual credits calculated for Oct-Dec; we forecasted power purchases for Jan-Apr based on actual generation and prices; and we forecasted May-Sep credits based on ESP forecasts from Study 14. Streamflows and generation decreased, so the power purchase forecast increased.
- For 3rd Quarter we have actual credits calculated for Oct-Mar; we forecasted power purchases for Apr-Jun based on actual generation and prices; and we forecasted Jul-Sep credits based on ESP forecasts from Study 18. Power purchase forecast increased because Mar actual calculation was higher than forecast, and Sep forecast increased due to update in Canadian operation and increased price forecast.
- For DOE's certification in August we have actual credits calculated for Oct-Jul, and we forecasted power purchases for Aug-Sep based on ESP estimates from Study 22. Actual credits in July were lower than forecasted, and the forecasted credits for Sep were lower than previously forecasted.
- The final credits are slightly higher than the previous forecast due to a change in September when the purchase amount and price increased.

# COMPOSITE COST POOL TRUE-UP TABLE

| | | Q4 Forecast ($000) | FY 2013 Rate Case Forecast ($000) | Q4 - FY 2013 Rate Case Difference ($000) | Q3 ($000) |
|---|---|---|---|---|---|
| 1 | **Operating Expenses** | | | | |
| 2 | **Power System Generation Resources** | | | | |
| 3 | **Operating Generation** | | | | |
| 4 | COLUMBIA GENERATING STATION (WNP-2) | $ 330,066 | $ 345,945 | $ (15,879) | $ 330,147 |
| 5 | BUREAU OF RECLAMATION | $ 127,116 | $ 119,891 | $ 7,225 | $ 128,691 |
| 6 | CORPS OF ENGINEERS | $ 208,096 | $ 215,700 | $ (7,604) | $ 215,700 |
| 8 | LONG-TERM CONTRACT GENERATING PROJECTS | $ 22,518 | $ 25,832 | $ (3,313) | $ 23,490 |
| 9 | **Sub-Total** | **$ 687,796** | **$ 707,368** | **$ (19,572)** | **$ 698,028** |
| 10 | **Operating Generation Settlement Payment and Other Payments** | | | | |
| 11 | COLVILLE GENERATION SETTLEMENT | $ 22,122 | $ 22,148 | $ (26) | $ 22,121 |
| 12 | SPOKANE LEGISLATION SETTLEMENT | $ - | $ - | $ - | $ - |
| 13 | **Sub-Total** | **$ 22,122** | **$ 22,148** | **$ (26)** | **$ 22,121** |
| 14 | **Non-Operating Generation** | | | | |
| 15 | TROJAN DECOMMISSIONING | $ (26,485) | $ 1,500 | $ (27,985) | $ (23,000) |
| 16 | WNP-1&3 DECOMMISSIONING | $ 607 | $ 448 | $ 159 | $ 600 |
| 17 | **Sub-Total** | **$ (25,878)** | **$ 1,948** | **$ (27,826)** | **$ (22,400)** |
| 18 | **Gross Contracted Power Purchases** | | | | |
| 19 | PNCA HEADWATER BENEFITS | $ 3,404 | $ 2,704 | $ 700 | $ 2,900 |
| 20 | HEDGING/MITIGATION (omit except for those assoc. with augmentation) | $ - | $ - | $ - | |
| 21 | GROSS OTHER POWER PURCHASES (omit, except for those assoc. with Designated BPA System Obligations or Designated BPA Contract Purchases | $ 12,399 | $ - | $ 12,399 | $ 7,775 |
| 22 | **Sub-Total** | **$ 15,802** | **$ 2,704** | **$ 13,098** | **$ 10,675** |
| 23 | **Bookout Adjustment to Power Purchases (omit)** | | | | |
| 24 | **Augmentation Power Purchases (omit - calculated below)** | | | | |
| 25 | AUGMENTATION POWER PURCHASES | | | | |
| 26 | **Sub-Total** | $ - | **$ -** | $ - | **$ -** |
| 27 | **Exchanges and Settlements** | | | | |
| 28 | RESIDENTIAL EXCHANGE PROGRAM (REP) | $ 201,933 | $ 201,760 | $ 173 | $ 202,689 |
| 29 | REP ADMINISTRATION COSTS (actuals are included under strategy and | - | $ 885 | $ (885) | $ - |
| 30 | OTHER SETTLEMENTS | $ - | $ - | $ - | $ - |
| 31 | **Sub-Total** | **$ 201,933** | **$ 202,645** | **$ (712)** | **$ 202,689** |
| 32 | **Renewable Generation** | | | | |
| 33 | RENEWABLES R&D (moved to Power R&D after rate case) | $ - | $ 5,939 | $ (5,939) | |
| 34 | Contra expense for unspent GEP revenues remaining at end of FY 2011 | $ (2,570) | $ (2,625) | $ 55 | $ (2,625) |
| 35 | RENEWABLES (excludes KIII) | $ 21,269 | $ 28,145 | $ (6,875) | $ 26,394 |
| 36 | **Sub-Total** | **$ 18,700** | **$ 31,459** | **$ (12,759)** | **$ 23,770** |
| 37 | **Generation Conservation** | | | | |
| 38 | GENERATION CONSERVATION R&D (moved to Power R&D after rate case) | | $ - | $ - | |
| 39 | DSM TECHNOLOGY | $ 1 | $ - | $ 1 | $ (0) |
| 40 | CONSERVATION ACQUISITION | $ 10,394 | $ 15,950 | $ (5,556) | $ 13,436 |
| 41 | LOW INCOME WEATHERIZATION & TRIBAL | $ 5,025 | $ 5,000 | $ 25 | $ 5,080 |
| 42 | ENERGY EFFICIENCY DEVELOPMENT | $ 5,368 | $ 11,500 | $ (6,132) | $ 7,200 |
| 43 | LEGACY | $ 773 | $ 900 | $ (127) | $ 800 |
| 44 | MARKET TRANSFORMATION | $ 14,517 | $ 14,500 | $ 17 | $ 14,880 |
| 45 | **Sub-Total** | **$ 36,078** | **$ 47,850** | **$ (11,772)** | **$ 41,396** |
| 46 | **Conservation Rate credit (CRC)** | $ - | **$ -** | $ - | **$ -** |
| 47 | **Power System Generation Sub-Total** | **$ 956,553** | **$ 1,016,121** | **$ (59,567)** | **$ 976,279** |

# COMPOSITE COST POOL TRUE-UP TABLE

| | | Q4 Forecast ($000) | FY 2013 Rate Case Forecast ($000) | Q4 - FY 2013 Rate Case Difference ($000) | Q3 ($000) |
|---|---|---|---|---|---|
| 48 | | | | | |
| 49 | **Power Non-Generation Operations** | | | | |
| 50 | **Power Services System Operations** | | | | |
| 51 | EFFICIENCIES PROGRAM (moved to Power R&D after rate case) | $ - | $ - | $ - | |
| 52 | PS SYSTEM OPERATIONS R&D (moved to Power R&D after rate case) | $ - | $ - | $ - | |
| 53 | INFORMATION TECHNOLOGY | $ 5,881 | $ 7,316 | $ (1,436) | $ 7,182 |
| 54 | GENERATION PROJECT COORDINATION | $ 7,423 | $ 5,919 | $ 1,505 | $ 6,622 |
| 55 | SLICE IMPLEMENTATION | $ 854 | $ 2,394 | $ (1,540) | $ 999 |
| 56 | **Sub-Total** | **$ 14,158** | **$ 15,629** | **$ (1,470)** | **$ 14,803** |
| 57 | **Power Services Scheduling** | | | | |
| 58 | OPERATIONS SCHEDULING | $ 8,426 | $ 10,010 | $ (1,584) | $ 10,312 |
| 59 | PS SCHEDULING R&D (moved to Power R&D after rate case) | | $ - | $ - | |
| 60 | OPERATIONS PLANNING | $ 6,444 | $ 6,709 | $ (265) | $ 6,937 |
| 61 | **Sub-Total** | **$ 14,871** | **$ 16,719** | **$ (1,849)** | **$ 17,249** |
| 62 | **Power Services Marketing and Business Support** | | | | |
| 63 | POWER R&D (forecast includes all the R&D items) | $ 6,186 | | $ 6,186 | $ 5,925 |
| 64 | SALES & SUPPORT | $ 18,822 | $ 20,130 | $ (1,308) | $ 17,948 |
| 65 | STRATEGY, FINANCE & RISK MGMT (actuals will include a part of REP a | $ 13,559 | $ 17,412 | $ (3,854) | $ 15,958 |
| 66 | EXECUTIVE AND ADMINISTRATIVE SERVICES (actuals will include a pa | $ 3,804 | $ 3,550 | $ 254 | $ 3,981 |
| 67 | CONSERVATION SUPPORT | $ 7,902 | $ 9,686 | $ (1,784) | $ 8,258 |
| 68 | **Sub-Total** | **$ 50,273** | **$ 50,778** | **$ (505)** | **$ 52,069** |
| 69 | **Power Non-Generation Operations Sub-Total** | **$ 79,302** | **$ 83,126** | **$ (3,824)** | **$ 84,121** |
| 70 | **Power Services Transmission Acquisition and Ancillary Services** | | | | |
| 71 | **PS Transmission Acquisition and Ancillary Services** | | | | |
| 72 | POWER SERVICES TRANSMISSION & ANCILLARY SERVICES | | | | |
| 73 | Transmission costs for Designated BPA System Obligations (not subj | $ 31,707 | $ 31,707 | $ (0) | $ 31,707 |
| 74 | 3RD PARTY GTA WHEELING | $ 51,244 | $ 52,891 | $ (1,647) | $ 52,891 |
| 75 | POWER SERVICES - 3RD PARTY TRANS & ANCILLARY SVCS (omit) | $ - | | | |
| 76 | GENERATION INTEGRATION (WIT expense included) | $ 9,941 | $ 8,709 | $ 1,232 | $ 12,968 |
| 77 | WIND INTEGRATION TEAM | $ - | $ 4,259 | $ (4,259) | $ - |
| 78 | TELEMETERING/EQUIP REPLACEMT | $ 1 | $ 51 | $ (50) | $ 51 |
| 79 | **Power Services Trans Acquisition and Ancillary Serv Sub-Total** | **$ 92,894** | **$ 97,617** | **$ (4,723)** | **$ 97,617** |
| 80 | **Fish and Wildlife/USF&W/Planning Council/Environmental Req** | | | | |
| 81 | **BPA Fish and Wildlife (includes F&W Shared Services)** | | | | |
| 82 | **Fish & Wildlife** | $ 238,984 | $ 241,384 | $ (2,400) | $ 242,959 |
| 83 | **USF&W Lower Snake Hatcheries** | $ 28,700 | $ 29,900 | $ (1,200) | $ 28,880 |
| 84 | **Planning Council** | $ 10,118 | $ 10,355 | $ (237) | $ 10,355 |
| 85 | **Environmental Requirements** | $ - | $ 305 | $ (305) | $ - |
| 86 | **Fish and Wildlife/USF&W/Planning Council Sub-Total** | **$ 277,802** | **$ 281,944** | **$ (4,143)** | **$ 282,194** |
| 87 | **BPA Internal Support** | | | | |
| 88 | **Additional Post-Retirement Contribution** | $ 17,820 | $ 17,821 | $ (0) | $ 17,821 |
| 89 | **Agency Services G&A (excludes direct project support)** | $ 52,108 | $ 52,662 | $ (554) | $ 53,949 |
| 90 | **BPA Internal Support Sub-Total** | **$ 69,928** | **$ 70,483** | **$ (555)** | **$ 71,770** |
| 91 | **Bad Debt Expense** | $ 12 | $ - | $ 12 | $ 3 |
| 92 | **Other Income, Expenses, Adjustments** | $ (139) | $ - | $ (139) | $ 719 |

# COMPOSITE COST POOL TRUE-UP TABLE

| | | Q4 Forecast ($000) | FY 2013 Rate Case Forecast ($000) | Q4 - FY 2013 Rate Case Difference ($000) | Q3 ($000) |
|---|---|---|---|---|---|
| 93 | **Non-Federal Debt Service** | | | | |
| 94 | **Energy Northwest Debt Service** | | | | |
| 95 | COLUMBIA GENERATING STATION DEBT SVC | $ 96,935 | $ 100,172 | $ (3,237) | $ 96,880 |
| 96 | WNP-1 DEBT SVC | $ 234,847 | $ 249,288 | $ (14,441) | $ 234,800 |
| 97 | WNP-3 DEBT SVC | $ 170,737 | $ 175,817 | $ (5,080) | $ 170,691 |
| 98 | EN RETIRED DEBT | $ - | $ - | $ - | $ - |
| 99 | EN LIBOR INTEREST RATE SWAP | $ - | $ - | $ - | $ - |
| 100 | **Sub-Total** | **$ 502,518** | **$ 525,277** | **$ (22,758)** | **$ 502,371** |
| 101 | **Non-Energy Northwest Debt Service** | | | | |
| 102 | TROJAN DEBT SVC | | $ - | $ - | $ - |
| 103 | CONSERVATION DEBT SVC | $ 2,617 | $ 2,377 | $ 241 | $ 2,610 |
| 104 | COWLITZ FALLS DEBT SVC | $ 11,474 | $ 11,709 | $ (235) | $ 11,595 |
| 105 | NORTHERN WASCO DEBT SVC | $ 1,926 | $ 2,224 | $ (297) | $ 1,927 |
| 106 | **Sub-Total** | **$ 16,018** | **$ 16,309** | **$ (292)** | **$ 16,133** |
| 107 | **Non-Federal Debt Service Sub-Total** | **$ 518,536** | **$ 541,586** | **$ (23,050)** | **$ 518,504** |
| 108 | **Depreciation** | $ 130,353 | $ 127,560 | $ 2,793 | $ 126,500 |
| 109 | **Amortization** | $ 92,819 | $ 86,767 | $ 6,052 | $ 92,478 |
| 110 | **Total Operating Expenses** | **$ 2,218,060** | **$ 2,305,204** | **$ (87,144)** | **$ 2,250,186** |
| 111 | | | | | |
| 112 | **Other Expenses** | | | | |
| 113 | Net Interest Expense | $ 205,601 | $ 221,546 | $ (15,945) | $ 205,288 |
| 114 | Interest credit adjustment (removes nonSlice cost pool interest credit included | $ - | $ (1,216) | $ 1,216 | $ - |
| 115 | LDD | $ 30,148 | $ 32,944 | $ (2,796) | $ 32,241 |
| 116 | Irrigation Rate Discount Costs | $ 19,305 | $ 19,305 | $ (0) | $ 19,305 |
| 117 | **Sub-Total** | **$ 255,054** | **$ 272,579** | **$ (17,525)** | **$ 256,834** |
| 118 | **Total Expenses** | **$ 2,473,115** | **$ 2,577,783** | **$ (104,668)** | **$ 2,507,020** |
| 119 | | | | | |
| 120 | **Revenue Credits** | | | | |
| 121 | Generation Inputs for Ancillary, Control Area, and Other Services Revenues | $ 143,689 | $ 131,078 | $ 12,611 | $ 140,828 |
| 122 | Downstream Benefits and Pumping Power revenues | $ 17,609 | $ 14,438 | $ 3,171 | $ 16,770 |
| 123 | 4(h)(10)(c) credit | $ 84,092 | $ 95,847 | $ (11,754) | $ 88,177 |
| 124 | Colville and Spokane Settlements | $ 4,600 | $ 4,600 | $ - | $ 4,600 |
| 125 | Energy Efficiency Revenues | $ 5,692 | $ 11,500 | $ (5,808) | $ 7,200 |
| 126 | Miscellaneous revenues | $ 4,255 | $ 3,420 | $ 835 | $ 4,349 |
| 127 | Renewable Energy Certificates | $ 1,151 | $ 2,836 | $ (1,685) | $ 1,163 |
| 128 | Pre-Subscription Revenues | $ 1,877 | $ 1,778 | $ 99 | $ 1,570 |
| 129 | Net Revenues from other Designated BPA System Obligations (Upper Baker) | $ 347 | $ 397 | $ (50) | $ 347 |
| 130 | WNP-3 Settlement revenues | $ 33,092 | $ 29,163 | $ 3,929 | $ 33,092 |
| 131 | RSS Revenues (not subject to true-up) | $ 2,611 | $ 2,611 | $ 0 | $ 2,611 |
| 132 | Firm Surplus and Secondary Adjustment (from Unused RHWM) | $ 9,057 | $ 5,827 | $ 3,229 | $ 6,387 |
| 133 | Balancing Augmentation Adjustment (not subject to true-up) | $ (6,268) | $ (6,268) | $ (0) | $ (6,268) |
| 134 | Transmission Loss Adjustment (not subject to true-up) | $ 25,266 | $ 25,266 | $ 0 | $ 25,266 |
| 135 | Tier 2 Rate Adjustment (not subject to true-up) | $ 645 | $ 645 | $ (0) | $ 645 |
| 136 | NR Revenues | $ 1 | $ 1 | $ (0) | $ 1 |
| 137 | **Total Revenue Credits** | **$ 327,716** | **$ 323,139** | **$ 4,578** | **$ 326,738** |

# COMPOSITE COST POOL TRUE-UP TABLE

| | | Q4 Forecast ($000) | FY 2013 Rate Case Forecast ($000) | Q4 - FY 2013 Rate Case Difference ($000) | Q3 ($000) |
|---|---|---|---|---|---|
| 138 | | | | | |
| 139 | **Augmentation Costs (not subject to True-Up)** | | | | |
| 140 | Tier 1 Augmentation Resources (includes Augmentation RSS and Augmentation RSC | $ 12,737 | $ 12,737 | $ - | $ 12,737 |
| 141 | Augmentation Purchases | $ 66,155 | $ 66,155 | $ (0) | $ 66,155 |
| 142 | **Total Augmentation Costs** | **$ 78,892** | **$ 78,892** | **$ (0)** | **$ 78,892** |
| 143 | | | | | |
| 144 | **DSI Revenue Credit** | | | | |
| 145 | Revenues 340 aMW, 340 aMW @ IP rate | $ 107,998 | $ 108,309 | $ (311) | $ 101,673 |
| 146 | **Total DSI revenues** | **$ 107,998** | **$ 108,309** | **$ (311)** | **$ 101,673** |
| 147 | | | | | |
| 148 | **Minimum Required Net Revenue Calculation** | | | | |
| 149 | Principal Payment of Fed Debt for Power | $ 122,800 | $ 122,800 | $ - | $ 122,800 |
| 150 | Irrigation assistance | $ 58,958 | $ 58,822 | $ 136 | $ 58,822 |
| 151 | Depreciation | $ 130,353 | $ 127,560 | $ 2,793 | $ 126,500 |
| 152 | Amortization | $ 92,819 | $ 86,767 | $ 6,052 | $ 92,478 |
| 152a | Non-Federal Interest Expense (prepay program) | $ (12,750) | $ - | $ (12,750) | $ 7,653 |
| 152b | Prepayment Credits | $ 7,653 | $ - | $ 7,653 | $ (12,750) |
| 153 | Capitalization Adjustment | $ (45,937) | $ (45,937) | $ 0 | $ (45,937) |
| 154 | Bond Premium Amortization | $ 185 | $ 185 | $ 0 | $ 185 |
| 155 | Principal Payment of Fed Debt exceeds non cash expenses | $ 9,435 | $ 13,047 | $ (3,612) | $ 13,493 |
| 156 | Minimum Required Net Revenues | $ 9,435 | **$ 13,047** | $ (3,612) | **$ 13,493** |
| 157 | | | | | |
| 158 | Annual Composite Cost Pool (Amounts for each FY) | **$ 2,125,728** | **$ 2,238,275** | **$ (112,547)** | **$ 2,170,994** |
| 159 | | | | | |
| 160 | **SLICE TRUE-UP ADJUSTMENT CALCULATION FOR COMPOSITE COST POOL** | | | | |
| 161 | TRUE UP AMOUNT (Difference between Q1 forecast and 2012 Rate Case) | $ (112,547) | | | $ (67,281) |
| 162 | Sum of TOCAs | 0.9655308 | | | 0.9740799 |
| 163 | expressed as a decimal, 100 percent = 1.0) | $ (116,565) | | | $ (69,072) |
| 164 | TRUE-UP ADJUSTMENT CHARGE BILLED (26.85407 percent) | **$ (31,302)** | | | **$ (18,549)** |

# Financial Disclosure

- The information contained in slides 4-15, 20-29, and 145-162 has been made publicly available by BPA on October 31, 2013 and contains BPA-approved Financial Information.
- The information contained in slides 16-19 and 130-144 has been made publicly available by BPA on October 31, 2013 and does not contain BPA-approved Financial Information.